TETRA TECH, INC.

TECHNICAL MEMORANDUM

Basewide Groundwater Monitoring Program Report Winter 2006 (Q1) Installation Restoration Program Site 24 Vandenberg Air Force Base, California

09 June 2006

Prepared by: Tetra Tech, Inc. 4213 State Street, Suite 100 Santa Barbara, California 93110

1.0 INTRODUCTION

This report documents the activities and results of the winter 2006 groundwater monitoring at Installation Restoration Program (IRP) Site 24 (Entomology Wash Rack), Vandenberg Air Force Base (AFB), Santa Barbara County, California. Samples were collected at Site 24 by Tetra Tech, Inc. (Tetra Tech) during February and March 2006. The location of Site 24 is shown on Figure 1.

The groundwater monitoring is being completed in accordance with the Basewide Groundwater Monitoring Program (BGMP) Work Plan (Tetra Tech, Inc. 2000a), the BGMP Health and Safety Plan Addendum (Tetra Tech 2000b), the Basewide Sampling and Analysis Plan (Tetra Tech 2003), the BGMP Quality Assurance Project Plan (QAPP) Addendum (Tetra Tech 2004), the Vandenberg AFB Hazardous Waste Management Plan (U.S. Air Force 2002), and the Waste Management Plan Addendum (Tetra Tech 2005a). Regulatory oversight of the work is being performed by the California Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board—Central Coast Region (RWQCB).

Site background information is summarized in Section 2.0. The scope of work and methodology for groundwater monitoring are presented in Section 3.0. The results of the quarterly monitoring are presented in Section 4.0. Quality Assurance/Quality Control is discussed in Section 5.0. Recommendations for future sampling are presented in Section 6.0.

A description and history of Site 24, including the site characterization portion of the remedial investigation (RI), can be found in the Supplemental RI Report (HydroGeoLogic, Inc. [HGL] 2004a). The results of previous environmental investigations can be found in the RI Report (HGL 2004b).

2.0 BACKGROUND

2.1 SITE DESCRIPTION

Site 24, known as the Entomology Wash Rack, is located in the main cantonment area of the base, west of the railroad spur adjacent to Utah Avenue and south of Nebraska Avenue (Figure 1). The area surrounding Site 24 consists of three general investigation areas/groundwater regions. These three areas/regions are the Southern Area (Region 1), the Western Area (Region 2), and the Northern Area (Region 3) as illustrated on Figure 1.

Region 1 of Site 24 was formerly used for vehicle maintenance, fueling, and washing. Adjacent to the former vehicle maintenance bay was a sump that contained water and was approximately 9 feet long, 6 feet wide, and 6 feet deep. The sump was removed and approximately 120 cubic yards of soil were excavated by the IT Corporation (now known as Shaw Environmental, Inc.) in 2001 (HGL 2004b). The fueling station had an 11,000-gallon steel fuel tank and associated piping that were removed between 1990 and 1992. Building 11193, located southwest of Region 2, was formerly used as a laundry facility. Contamination sources at Site 24 include pesticides in soil around the entomology wash rack, gasoline associated with the abandoned underground storage tank (UST), diesel and chlorinated solvents associated with former maintenance bay and adjacent sump, and chlorinated solvents associated with the former laundry facility. HGL conducted a pilot study in the northeast portion of Region 2 between 9 October 2003 and 6 February 2004 where CL-Out microbes and permanganate were injected into shallow zone injection wells 24-PIW-8-1 and 24-PIW-8-2 (HGL 2004a). Between 19 September 2005 and 21 September 2005, Versar Inc. and ARCADIS installed one new injection well and three new monitoring wells adjacent to the existing injection wells. These contractors injected molasses substrate in the new injection well (24-PIW-8-3) and the two existing injection wells (24-PIW-8-1 and 24-PIW-8-2) on 11 and 12 January 2006. An increase in total organic carbon and a decrease in pH were observed by Versar during weekly sampling of nearby wells in January 2006 following injection (Versar 2006). For more information on this project; contact the 30 CES/CEVR. Region 3 is the area north of Regions 1 and 2 and hydrologically downgradient from Regions 1 and 2 in the intermediate and deep groundwater zones. Region 3 does not have significant surface development.

2.2 HYDROGEOLOGY

Site 24 is located on an uplifted late-Pleistocene marine terrace within the Burton Mesa physiogeographic province. Groundwater typically occurs unpredictably in small lenses perched on low-permeability layers on Burton Mesa. At the site, the alluvial deposits overlying the bedrock contain three generalized groundwater zones referred to as the "shallow," "intermediate," and "deep" zones. All three zones have relatively low groundwater recharge rates and minimal groundwater volume. Groundwater flow occurs primarily through small lenses perched on low-permeability layers; through thin, narrow seams between zones of low permeability; or along the bedrock surface following potential paleochannels in the bedrock erosional topography. Natural recharge to the Site 24 area groundwater is primarily from precipitation. Infiltration from precipitation occurs in all unpaved areas. Some runoff is diverted into storm channels that transport water toward IRP Site 20. Irrigation water southwest, west, and northwest of the Site 24 boundary collects in a drainage "wetlands" and may contribute significantly to the groundwater budget in the Site 24 area.

Shallow groundwater occurs as a perched saturated zone overlying a low-permeability clay layer that is encountered from 15 to 25 feet below ground surface (bgs) in the Site 24 area (HGL 2004a). The shallow groundwater zone does not exist north of Regions 1 and 2 (Figure 2A). Intermediate groundwater overlies another distinct low-permeability clay layer that occurs between 35 and 45 feet bgs (HGL 2004a). The intermediate groundwater zone extends north and west from the Site 24 area into Regions 2 and 3 (Figure 2B). Deep groundwater occurs below the intermediate clay layer from 60 feet bgs down to bedrock (HGL 2004a). The deep groundwater zone occurs throughout Regions 1, 2, and 3 (Figure 2C).

Shallow zone groundwater levels measured in February 2006 indicate that groundwater elevations ranged from approximately 443 to 453 feet above mean sea level (msl) (Table 1). The interpreted direction of shallow zone groundwater flow during this timeframe indicates flow in several directions (Figure 2A). Near the southwestern edge of the Site 24 boundary, groundwater flows radially away from a potentiometric high with an average hydraulic gradient of 0.05 feet per foot. Near the northwest trending "unlined drainage route" in Region 2, groundwater flows towards a potentiometric low with an average hydraulic gradient of 0.05 feet per foot.

Intermediate zone groundwater levels measured in February 2006 indicate that groundwater elevations ranged from approximately 420 to 451 feet above msl. During winter 2006, the interpreted direction of intermediate zone groundwater flow at Site 24 was generally to the northeast with an average hydraulic gradient of 0.04 feet per foot in Regions 2 and 3 and generally to the southeast in Region 1 (Figure 2B).

Deep zone groundwater levels measured in February and March 2006 indicate that groundwater elevations ranged from approximately 393 to 449 feet above msl. During winter 2006, the interpreted direction of deep zone groundwater flow at Site 24 was generally to the northeast with an average hydraulic gradient of 0.02 feet per foot in Regions 2 and 3, to the northwest with an average hydraulic gradient of 0.15 feet per foot on the western edge of Region 3, and to the southeast with an average hydraulic gradient of 0.1 feet per foot in Region 1 and the eastern portion of Region 2 (Figure 2C).

3.0 SCOPE OF WORK

The work performed for the winter 2006 groundwater monitoring at Site 24 included measuring groundwater levels, collecting groundwater for field and laboratory analysis, and preparing this report. In addition, MicroPurge pumps were installed in wells 24-PMW-1, 24-MW-9A, 24-MW-22A, 24-MW-3B, and 24-MW-9B during winter 2006.

3.1 GROUNDWATER MONITORING

Fifty-six monitoring wells were sampled at Site 24 during winter 2006. Grundfos pumps, MicroPurge pumps, and a bailer were used for purging groundwater from shallow zone wells 24-PMW-1 through 24-PMW-5, 24-PMW-8, 24-PMW-8-2, 24-PIW-8-1, 24-PIW-8-2, 24-PMW-9 through 24-PMW-11, 24-PMW-13, 24-PMW-18, 24-PMW-19, 24-PMW-21, 24-PMW-22, and 24-PMW-26; intermediate zone wells 24-MW-2, 24-MW-3A, 24-MW-5A, 24-MW-8A, 24-MW-8A-2, 24-MW-9A through 24-MW-12A, 24-MW-14A, 24-MW-15A, 24-MW-22A, 24-MW-26A, and 24-MW-28A through 24-MW-30A; and deep zone wells 24-MW-3B through 24-MW-8B through 24-MW-17B, and 24-MW-19B through 24-MW-27B. Duplicate samples were collected from shallow zone wells 24-PMW-1 and 24-PIW-8-1 and deep zone wells 24-MW-31B was not sampled due to insufficient water in the well. Intermediate zone wells 24-MW-6 and 24-MW-7 were dry and were not sampled. Sampling was conducted in accordance with the documents cited in Section 1.0. Measured groundwater elevations are presented in Table 1, and groundwater contours are illustrated on Figures 2A, 2B, and 2C. Purge records are provided in Appendix A.

In general, wells were purged until a minimum of one pump and tubing volume of water (for MicroPurge pumps) or a minimum of three well volumes of water (for Grundfos pumps and bailers) were removed and water quality parameters had stabilized. Criteria for determining stabilization are three successive measurements of temperature within ± 1 degree Celsius, pH within ± 0.1 , conductivity within ± 5 percent, and a turbidity reading of less than 5 nephelometric turbidity units (NTUs). In cases where stability or a turbidity reading of less than 5 NTUs was not obtained, samples were collected after purging a minimum of five pump and tubing volumes of water (for MicroPurge pumps) or a minimum of five well volumes of water (for Grundfos pumps and bailers).

3.1.1 MicroPurge Groundwater Sampling

MicroPurge sampling was conducted at shallow zone wells 24-PMW-1, 24-PMW-11 and 24-PMW-19, intermediate zone wells 24-MW-2, 24-MW-9A, 24-MW-12A, and 24-MW-22A, and deep zone wells 24-MW-3B, 24-MW-4B, 24-MW-9B, 24-MW-10B, 24-MW-12B, 24-MW-14B, 24-MW-15B, 24-MW-17B, 24-MW-19B, and 24-MW-23B through 24-MW-25B. Pumping rates were calibrated for each well prior to purging to maintain a static water level (i.e., no drawdown). Shallow zone well 24-PMW-19, intermediate zone well 24-MW-12A, and deep zone well 24-MW-4B were sampled after purging at least five well volumes of water due to high turbidity. Dedicated MicroPurge pumps were newly installed in wells 24-PMW-1, 24-MW-9A, 24-MW-22A, 24-MW-3B, and 24-MW-9B for the winter 2006 sampling round. At least five pump and tubing volumes of water were purged from wells 24-PMW-1, 24-MW-9A, 24-MW-22A before sampling in order to better assess water quality parameters after installation of the MicroPurge systems.

3.1.2 Standard Groundwater Sampling

A 2-inch Grundfos pump was used for purging groundwater from all Site 24 monitoring wells sampled this quarter except those listed in Section 3.1.1, which were purged using dedicated MicroPurge pumps,

and well 24-MW-14A, which was purged using a disposable Teflon bailer. All Site 24 wells purged with a 2-inch Grundfos pump or disposable Teflon bailer were sampled after purging a minimum of three well volumes of water, allowing water quality parameters to stabilize, or after sufficient recharge if the well was purged dry. The groundwater in the wells was allowed to sufficiently recharge before the samples were collected with disposable Teflon bailers. Shallow zone wells 24-PMW-2, 24-PMW-4, 24-PMW-5, 24-PMW-13, intermediate zone wells 24-MW-28A, 24-MW-29A, and 24-MW-30A, and deep zone well 24-MW-4B were sampled after purging at least five well volumes of water due to high turbidity.

4.0 RESULTS

Temperature, conductivity, pH, and turbidity were measured in the field during sampling. Readings taken immediately prior to sampling are presented in Table 2. Fixed laboratory analyses were performed by EMAX Laboratories, Inc. in Torrance, California. Samples were analyzed according to the work plan (Tetra Tech 2000a) for dissolved metals (aluminum, antimony, arsenic, cadmium, selenium, and thallium only) by U.S. Environmental Protection Agency (EPA) methods SW6010B and SW7470A, total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), and methanol and ethanol by EPA method SW8015B, volatile organic compounds (VOCs) by EPA method SW8260B, 1,4-dioxane by modified EPA method SW8270C with single ion monitoring (SIM) quantitation, semivolatile organic compounds (SVOCs) by EPA method SW8270C, organochlorine pesticides (OCPs) by EPA method SW8081B, and organophosphorous pesticides (OPPs) by EPA method SW8141A. Laboratory analyses and data validation were conducted according to the QAPP Addendum (Tetra Tech 2004). Data validation was performed on 100 percent of the analytical data. Analytical results are presented in Tables 3 through 7 and on Figures 3A, 3B, and 3C. These figures show analytical results from shallow, intermediate, and deep groundwater wells, respectively. Historical data for key contaminants of concern (COCs) are presented in Table 8 and on Figures 4A, 4B, and 4C. These figures show historical data for key COCs from shallow, intermediate, and deep groundwater wells, respectively. Chain-of-custody records are provided in Appendix B.

4.1 METALS

Groundwater samples collected from the wells listed on Table 3 were analyzed for dissolved aluminum, antimony, arsenic, cadmium, selenium, and thallium concentrations. Dissolved metal concentrations were compared to the California primary maximum contaminant levels (MCLs) and the 95th percentile background threshold values (BTVs) for groundwater (Jacobs Engineering Group, Inc. 1994). Results for dissolved metals are presented in Table 3. Results for dissolved metals above BTVs are presented on Figures 3A, 3B, and 3C.

Dissolved aluminum was detected above the BTV of 1,200 micrograms per liter ($\mu g/L$) and the MCL of 1,000 $\mu g/L$ in groundwater from wells 24-PMW-8 and 24-PMW-13 at concentrations of 71,500 $\mu g/L$ and 4,470 $\mu g/L$, respectively.

Dissolved arsenic was detected above the BTV of 7 μ g/L and the MCL of 10 μ g/L in groundwater from four wells in the shallow and deep groundwater zones. The highest concentration (266 μ g/L) was detected in groundwater from shallow zone well 24-PMW-8.

Dissolved selenium was detected above the BTV of 3 μ g/L but below the MCL of 50 μ g/L in groundwater from 23 wells in all three groundwater zones. The highest concentration (31.6 μ g/L) was detected in groundwater from shallow zone well 24-PMW-8.

Dissolved thallium was detected above the BTV of 1 μ g/L and the MCL of 2 μ g/L in groundwater from eight wells in all three groundwater zones. However, only the results from intermediate zone well

24-MW-2 and deep zone well 24-MW-10B (parent and duplicate sample) were not qualified for blank contamination. The highest thallium concentration detected that was not qualified for blank contamination (6.2 µg/L) was detected in the duplicate sample from deep zone well 24-MW-10B.

4.2 TOTAL PETROLEUM HYDROCARBONS

Total petroleum hydrocarbons as gasoline were detected in groundwater from 6 of the 9 wells sampled for TPHg (Table 4). The highest concentrations of TPHg were detected in groundwater from shallow zone wells 24-PMW-18 and 24-PMW-1, at concentrations of 22 and 6.4 milligrams per liter (mg/L) (5.8 mg/L in the duplicate sample), respectively (Table 4). Shallow zone wells 24-PMW-1, 24-PMW-2, 24-PMW-8, 24-PMW-18, and 24-PMW-22 were the only Site 24 wells where TPHg concentrations were above the Leaking Underground Fuel Tank (LUFT) action level of 1 mg/L for TPH in groundwater. The TPHg detected in groundwater from wells 24-PMW-8 is a result of chlorinated hydrocarbons (primarily trichloroethene [TCE], tetrachloroethene [PCE], and *cis*-1,2-dichloroethene [DCE]) in the gasoline range, since no benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in groundwater from these wells. The TPHg detected in groundwater from wells 24-PMW-18 and 24-PMW-22 were also a result of chlorinated hydrocarbons in the gasoline range since the BTEX concentrations (ranging from 0.23 to 2 μg/L) were relatively low compared to detected PCE concentrations of 47,000 and 28,000 μg/L and TCE concentrations of and 67 and 69 μg/L, respectively (Table 5).

An analysis of the relationship between elevated chlorinated solvent concentrations and TPHg detected in groundwater from well 24-PMW-18 was provided in the summer 2005 report (Tetra Tech 2005b). This report concluded that the high concentrations of TPHg in the absence of BTEX at Site 24 are the result of chlorinated hydrocarbons being measured by method SW8015B in the gasoline range. Detections of TPHg in the presence of low concentrations of BTEX and accompanied by high concentrations of PCE and TCE are also caused by the same phenomenon.

Total petroleum hydrocarbons as diesel were detected in groundwater from 13 of the 41 wells sampled for TPHd (Table 4). The highest concentrations of TPHd were detected above the LUFT action level of 1 mg/L for TPH in groundwater from shallow zone wells 24-PMW-8 and 24-PMW-1 at concentrations of 110 and 2.3 mg/L (2.1 mg/L in the duplicate sample), respectively.

Total petroleum hydrocarbon concentrations were similar to those previously detected with the following exceptions (Table 8). TPHd concentrations in groundwater from shallow zone well 24-PMW-8 have increased from 1.1 mg/L in summer 2005 to 52 mg/L in fall 2005, and 110 mg/L in winter 2006. The high TPHd were detected in groundwater from well 24-PMW-8 and the increasing trend may be a result of drilling and well development activities at new nearby wells. TPHd results next quarter will be used to confirm this trend. The TPHd concentration in groundwater from shallow zone well 24-PMW-11 has been decreasing since winter 2005 and was at a historically low concentration of 0.91 mg/L during winter 2006

4.3 VOLATILE ORGANIC COMPOUNDS

Groundwater collected from all wells sampled during winter 2006 was analyzed for VOCs. VOCs were detected in groundwater samples from 47 of the 56 wells sampled (Table 5).

PCE was detected above the MCL of 5 μ g/L in groundwater from 27 wells. The highest shallow zone concentration was detected in groundwater from well 24-PMW-18 (47,000 μ g/L) (Figure 3A). The highest intermediate zone concentration was detected in groundwater from well 24-MW-26A (2,900 μ g/L) (Figure 3B). The highest deep zone concentration was detected in groundwater from well 24-MW-13B (660 μ g/L) (Figure 3C).

TCE was detected above the MCL of 5 μ g/L in groundwater from 27 wells. The highest shallow zone concentration was detected in groundwater from well 24-PMW-2 (250 μ g/L). The highest intermediate zone TCE concentration was detected in groundwater from wells 24-MW-8A and 24-MW-8A-2 (280 in both). The highest deep zone TCE concentration was detected in groundwater from well 24-MW-14B (1,100 μ g/L in the parent sample and 1,000 μ g/L in the duplicate sample).

The compound cis-1,2-DCE was detected above the MCL of 6 μ g/L in groundwater from 13 wells. The highest shallow zone cis-1,2-DCE concentrations were detected in the groundwater sample from wells 24-PMW-8-2 and 24-PMW-8 (80 and 65 μ g/L, respectively). The highest intermediate zone concentration was detected in well 24-MW-8A-2 (55 μ g/L), and the highest deep zone concentration was detected in well 24-MW-8B (64 μ g/L).

Vinyl chloride was detected above the MCL of $0.5 \mu g/L$ in groundwater from 5 wells. The highest vinyl chloride concentration (17 $\mu g/L$) was detected in the groundwater sample from shallow zone well 24-PMW-3. Vinyl chloride was not detected in the intermediate zone wells and was detected once above the MCL in groundwater from deep zone well 24-MW-5B at a concentration of $2.8 \mu g/L$.

The compound 1,1-DCE was detected above the MCL of 6 μ g/L in groundwater from 5 wells. The highest concentration (520 μ g/L) was detected in the groundwater sample from deep zone well 24-MW-5B. The highest concentration detected in groundwater from the shallow zone wells was 200 μ g/L in groundwater from well 24-PMW-4. The only concentration detected in the intermediate zone wells was 62 μ g/L in groundwater from well 24-MW-5A.

The compound 1,1,1-trichloroethane (TCA) was detected above the MCL of 200 μ g/L in groundwater from shallow zone well 24-PMW-4 at a concentration of 620 μ g/L.

The compound 1,1,2-TCA was detected above the MCL of 5 μ g/L in the groundwater sample from shallow zone well 24-PMW-1 at a concentration of 9.8 μ g/L (9 μ g/L in the duplicate sample) and in the groundwater sample from deep zone well 24-MW-5B at a concentration of 6.2 μ g/L.

The compound 1,1-dichloroethane (DCA) was detected above the MCL of 5 μ g/L in groundwater from 5 wells. The highest 1,1-DCA concentration (510 μ g/L) was detected in the groundwater sample from shallow zone well 24-PMW-4. This compound was also detected at concentrations above the MCL in groundwater from shallow zone wells 24-PMW-1 and 24-PMW-5, intermediate zone well 24-MW-5A, and deep zone well 24-MW-5B.

The compound 1,2-DCA was detected above the MCL of 0.5 μ g/L in groundwater from 5 wells. The highest 1,2-DCA concentration (310 μ g/L) was detected in the duplicate groundwater sample from shallow zone well 24-PMW-1 (280 μ g/L in the parent sample). The compound was detected in one deep zone well (24-MW-5B) and one intermediate zone well (24-MW-5A) at concentrations of 9.4 and 0.64 μ g/L, respectively.

Benzene was detected above the MCL of 1 μ g/L in groundwater from 3 of the 56 wells sampled. Benzene was only detected above the MCL in groundwater samples from shallow zone wells. The highest benzene concentrations were detected in the parent and duplicate groundwater samples from shallow zone well 24-PMW-1 (850 and 930 μ g/L, respectively).

The compound 1,4-dioxane was detected above the Department of Health Services Notification Level (DHS NL) of 3 μ g/L in groundwater from shallow zone well 24-PMW-5 at a concentration of 59 μ g/L, from intermediate zone wells 24-MW-5A at a concentration of 110 μ g/L; and from deep zone well 24-MW-5B at a concentration of 980 μ g/L (Table 6). The 1,4-dioxane result for the sample from well

24-PMW-4 was rejected and not usable for any purpose. However, the compound 1,4-dioxane was detected in groundwater from well 24-PMW-4 at a concentration of 310 μ g/L during fall 2005 and is believed to be present in groundwater from this well.

Methanol and ethanol were detected in groundwater from well 24-PMW-8 at concentrations of 11 and 200 mg/L, respectively (Table 4).

Significant concentrations of the ketones acetone and 2-butanone were detected in groundwater from wells 24-PIW-8-1, 24-PIW-8-2, 24-PMW-8, and 24-PMW-8-2. Acetone concentrations in groundwater from these wells ranged from 68 to 6,500 μ g/L, and 2-butanone concentrations ranged from 110 to 4,900 μ g/L. These high concentrations appear to be related to the remedial activities associated with wells 24-PIW-8-1 and 24-PIW-8-2 (Section 2.1). Additionally, acetone was detected in groundwater from wells 24-PMW-3 and 24-MW-21B at concentrations of 19 μ g/L and 14 μ g/L, respectively.

In general, VOC concentrations detected above MCLs during winter 2006 were similar to those previously detected, with the following noteworthy exceptions (Table 8 and Figures 4A, 4B, and 4C). During winter 2006, PCE was detected for the first time in groundwater from intermediate zone well 24-MW-15A at a concentration of 15 μ g/L, which is above the MCL of 5 μ g/L. The PCE concentrations in groundwater from intermediate zone well 24-PMW-10 show an increasing trend. The PCE concentration in groundwater for intermediate zone well 24-MW-8A increased from 11 to 27 μ g/L, which represents a historical high. Winter 2006 was the first quarter that PCE was not detected in groundwater from shallow zone well 24-PMW-8-2 following an overall decreasing trend; all previous detections had been above the MCL. In addition, the PCE concentration in groundwater from shallow zone well 24-PIW-8-2 has decreased from 65 μ g/L in fall 2004 to 0.79 μ g/L in winter 2006, which represents a historical low. Finally, PCE concentrations in groundwater from intermediate zone well 24-MW-22A have generally been increasing, while PCE concentrations in groundwater from shallow zone well 24-PIW-8-1 have decreased to below detection limits.

Between summer 2005 and winter 2006, the TCE concentration in groundwater from shallow zone wells 24-PMW-8-2, 24-PIW-8-1, and 24-PIW-8-2 decreased from 420, 180, and 380 $\mu g/L$, respectively, to 11, 11, and 25 $\mu g/L$, respectively, which represent historical lows with the exception of a TCE detection of 3 $\mu g/L$ in well 24-PMW-8-2 during fall 2004. Additionally, TCE was detected at a concentration of 9.5 $\mu g/L$ in groundwater from intermediate zone well 24-MW-15A, which represents a historical high and the first time TCE has been detected above the MCL of 5 $\mu g/L$ in groundwater from this well. Deep zone wells 24-MW-9B and 24-MW-20B increased from below the MCL to 10 $\mu g/L$ and 6.3 $\mu g/L$, respectively, which represent historical highs.

Between summer 2005 and winter 2006, the *cis*-1,2-DCE concentration in groundwater from shallow zone well 24-PIW-8-1 decreased from 16 μ g/L to 1.3 μ g/L, which represents a historical low. Winter 2006 is the first quarter that *cis*-1,2-DCE was not detected in groundwater from shallow zone well 24-PIW-8-2. The *cis*-1,2-DCE concentration in groundwater from intermediate zone well 24-MW-8A-2 shows a decreasing trend and the *cis*-1,2-DCE concentration in groundwater from deep zone well 24-MW-22B increased to above the MCL of 6 μ g/L, from 2.7 μ g/L during fall 2005 to 8.4 μ g/L during winter 2006, which represents a historical high and the first time *cis*-1,2-DCE has been detected above the MCL in groundwater from this well. Additionally, the *cis*-1,2-DCE concentration in well 24-MW-23B has been increasing.

Vinyl chloride was detected for the first time in groundwater from shallow zone well 24-PMW-8 during winter 2006 at a concentration of 3.6 μ g/L, which is above the MCL of 0.5 μ g/L. In addition, the vinyl chloride concentration in shallow zone well 24-PMW-3 has generally been decreasing.

The 1,1,1-TCA concentration in groundwater from shallow zone well 24-PMW-5 decreased from 480 to 180 μ g/L between fall 2005 and winter 2006, which represents a historical low and the first time the compound has been detected below the MCL of 200 μ g/L. Additionally, the 1,1,1-TCA concentration in groundwater from shallow zone well 24-PMW-4 decreased from 5,000 μ g/L during winter 2005 to 620 μ g/L during winter 2006 and the 1,1,1-TCA concentration in groundwater from deep zone well 24-MW-5B has decreased from 110 μ g/L during winter 2005 to 66 μ g/L during winter 2006.

4.4 SEMIVOLATILE ORGANIC COMPOUNDS

Groundwater samples from 7 of the 56 wells sampled during winter 2006 were analyzed for SVOCs. The compounds benzoic acid, 4-methylphenol, and phenol were detected in groundwater from well 24-PMW-8 at concentrations of 1,800, 1,000, and 1,900 μ g/L, respectively. Naphthalene was detected in the sample from well 24-PMW-2 at a concentration of 5.7 μ g/L.

4.5 PESTICIDES

Groundwater samples collected from shallow zone wells 24-PMW-1, 24-PMW-2, and 24-PMW-3 were analyzed for OCPs and OPPs. Five OCPs were detected in groundwater from well 24-PMW-1 and one OCP was detected in the groundwater from well 24-PMW-3 (Table 7). Heptachlor epoxide and gammabenzene hexachloride (lindane) were detected above their respective MCLs of 0.01 and 0.2 μ g/L in the duplicate sample from well 24-PMW-1 at concentrations of 0.092 and 0.31 μ g/L, respectively. OPPs were not detected in groundwater from well 24-PMW-2.

5.0 QUALITY ASSURANCE/QUALITY CONTROL

All of the analytical data presented in this report have been validated according to the QAPP Addendum (Tetra Tech 2004). The data validation process includes review of sample preservation, temperature, and hold times; detection and quantitation limits; instrument calibration; and equipment blank, trip blank, method blank, laboratory control sample, and matrix spike/matrix spike duplicate. Data validation qualifiers and comments are provided on the data tables to indicate the results of the data validation and to quantitatively indicate the usability of the data. In addition, field sampling records are reviewed to assess the potential for any field conditions to adversely impact the data quality.

Selenium and thallium analytical results were qualified for blank contamination due to their presence in the associated method blanks. The 1,4-dioxane result for the sample from well 24-PMW-4 was rejected and is not usable for any purpose. These discrepancies are considered minor and do not significantly impact the data quality or interpretations presented in this report. The data quality objectives for the winter 2006 sampling at Site 24 were achieved.

6.0 RECOMMENDATIONS

In the fall 2005 Groundwater Monitoring Report, Tetra Tech and the Air Force made the following recommendations:

1. Adding a screening round of analysis for 1,2,3-trichloropropane (TCP) for wells 24-PMW-4, 24-PMW-5, 24-MW-5A, 24-MW-5B, 24-MW-8A, 24-MW-8B, 24-PMW-8, 24-MW-11A, 24-MW-14B, 24-PMW-18, 24-MW-26A, 24-MW-26B during spring 2006. The RWQCB and DTSC requested that the Air Force reevaluate the conceptual site model, identify data gaps, and recommend actions to fill those data gaps as well as considering concentrations of TCP in other site wells when preparing recommendations for further sampling of emergent chemicals (Comment 2). The Air Force concurred with the State and provided a revised recommendation

for sampling TCP at Site 24 in response to State comments on the fall 2005 report, dated 26 May 2006. The Air Force has not received a response from the State yet on the Air Force response to State comments.

- 2. Add a screening round of analysis for 1,4-dioxane for wells 24-PMW-4, 24-PMW-5, 24-MW-5A, 24-MW-5B, 24-MW-8A, 24-MW-8B, 24-PMW-8, 24-MW-11A, 24-MW-14B, 24-PMW-18, 24-MW-26A, and 24-MW-26B during spring 2006. The RWQCB and DTSC requested that the Air Force reevaluate the conceptual site model, identify data gaps, and recommend actions to fill those data gaps as well as considering concentrations of 1,4-dioxane in other site wells when preparing recommendations for further sampling of emergent chemicals (Comment 2). The Air Force concurred with the State and provided a revised recommendation for sampling 1,4-dioxane at Site 24 in response to State comments on the fall 2005 report, dated 26 May 2006. The Air Force has not received a response from the State yet on the Air Force response to State comments.
- 3. Remove TPHg analysis for well 24-PMW-18. The RWQCB and DTSC concurred with this recommendation. TPHg sampling may be reinstated as necessary to support site closure decisions.
- 4. Reduce the TPHd sampling frequency for shallow zone well 24-PMW-22 from quarterly to annually during the winter quarters beginning with the spring 2006 sampling round. The RWQCB and DTSC concurred with this recommendation.
- 5. Remove TPHd analysis for intermediate zone well 24-MW-3A beginning with the spring 2006 sampling round. The RWQCB and DTSC concurred with this recommendation.
- 6. Reduce the TPHd sampling frequency for intermediate zone well 24-MW-8A from quarterly to annually during the winter quarters beginning with the spring 2006 sampling round. The RWQCB and DTSC concurred with this recommendation.
- 7. Reduce the TPHd sampling frequency for intermediate zone well 24-MW-12A from quarterly to semiannually during the winter and summer quarters beginning with the spring 2006 sampling round. The RWQCB and DTSC concurred with this recommendation.
- 8. Reduce the sampling frequency for intermediate zone wells 24-MW-14A and 24-MW-15A from quarterly to semiannually during the winter and summer quarters beginning with the spring 2006 sampling round. We recommend continuing to monitor water levels in these wells quarterly for use in groundwater elevation contouring. The RWQCB and DTSC concurred with this recommendation.
- 9. Remove TPHd analysis for intermediate zone well 24-MW-14A beginning with the spring 2006 sampling round. The RWQCB and DTSC concurred with this recommendation.
- 10. Reduce the TPHd sampling frequency for intermediate zone well 24-MW-22A from quarterly to annually during the winter quarters beginning with the spring 2006 sampling round. The State concurred with this recommendation.
- 11. Reduce the sampling frequency for intermediate zone well 24-MW-30A from quarterly to annually during the winter quarters beginning with the spring 2006 sampling round. The RWQCB and DTSC did not concur with this recommendation. Quarterly monitoring will continue until a clearer trend has been established.

12. Reducing the TPHd sampling frequency for deep zone well 24-MW-3B from quarterly to annually during the winter quarters beginning with the spring 2006 sampling round. The RWQCB and DTSC concurred with this recommendation.

The spring 2006 sampling will be conducted according to the work plan (Tetra Tech 2000a).

7.0 REFERENCES

HydroGeoLogic Inc. (HGL)

2004a Supplemental Remedial Investigation Report Site 24—Entomology Wash Rack, Vandenberg Air Force Base, California. Draft. September.

HydroGeoLogic Inc. (HGL)

2004b Remedial Investigation Report Site 24—Entomology Wash Rack, Vandenberg Air Force Base, California. Final. August.

Jacobs Engineering Group, Inc.

1994 Basewide Background Sampling Report. Final. Prepared for the Air Force Center for Environmental Excellence. June.

Tetra Tech. Inc.

2000a Basewide Groundwater Monitoring Program Work Plan. Prepared for 30 CES/CEV, Installation Restoration Program, Vandenberg Air Force Base, California, and Headquarters Air Force Space Command, Peterson Air Force Base, Colorado. December.

Tetra Tech, Inc.

2000b Basewide Groundwater Monitoring Program Health and Safety Plan Addendum. Prepared for 30 CES/CEV, Installation Restoration Program, Vandenberg Air Force Base, California, and Headquarters Air Force Space Command, Peterson Air Force Base, Colorado. December.

Tetra Tech. Inc.

2002 Basewide Groundwater Monitoring Program Interpretation, Visualization, and Optimization, Vandenberg Air Force Base Installation Restoration Program. Presentation prepared for 30 CES/CEVR Installation Restoration Program, Vandenberg Air Force Base, California. March.

Tetra Tech. Inc.

2003 Final Basewide Sampling and Analysis Plan. Prepared for 30 CES/CEV Installation Restoration Program, Vandenberg Air Force Base, California, and Headquarters Air Force Space Command, Peterson Air Force Base, Colorado. September.

Tetra Tech, Inc.

2004 Basewide Groundwater Monitoring Program Quality Assurance Project Plan Addendum. Final. Prepared for Department of the Air Force 30 CES/CEVR, 806 13th Street, Suite 116, Vandenberg Air Force Base, California, and Department of the Air Force, Air Force Center for Environmental Excellence, DERA Restoration Division, 3300 Sidney Brooks, Brooks City-Base, Texas. July.

Tetra Tech, Inc.

2005a *Waste Management Plan Addendum. Final.* 730 CES/CEVR, Installation Restoration Program, Vandenberg Air Force Base, California, and Headquarters Air Force Space Command, Peterson Air Force Base, Colorado. February.

Tetra Tech, Inc.

2005b Basewide Groundwater Monitoring Program Report, Summer 2005, Installation Restoration Program Site 24, Vandenberg Air Force Base, California. Prepared for Department of the Air Force 30 CES/CEVR, 806 13th Street, Suite 116, Vandenberg Air Force Base, California, and Department of the Air Force, Air Force Center for Environmental Excellence, DERA Restoration Division, 3300 Sidney Brooks, Brooks City-Base, Texas. December.

U.S. Air Force

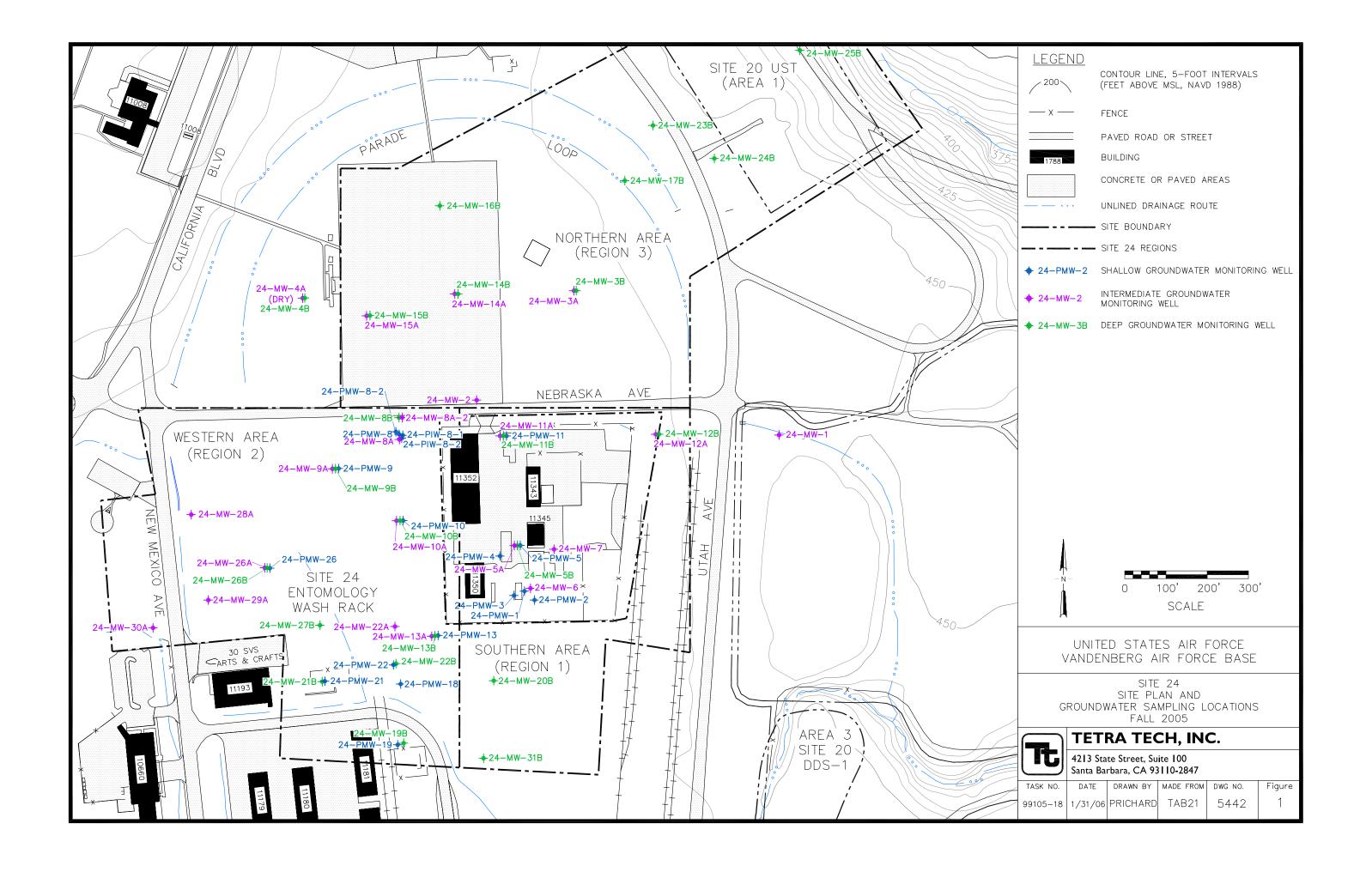
1997 Long-Term Monitoring Optimization Guide, Final, Version 1.1. Headquarters Air Force Center for Environmental Excellence, Brooks Air Force Base, Texas. October.

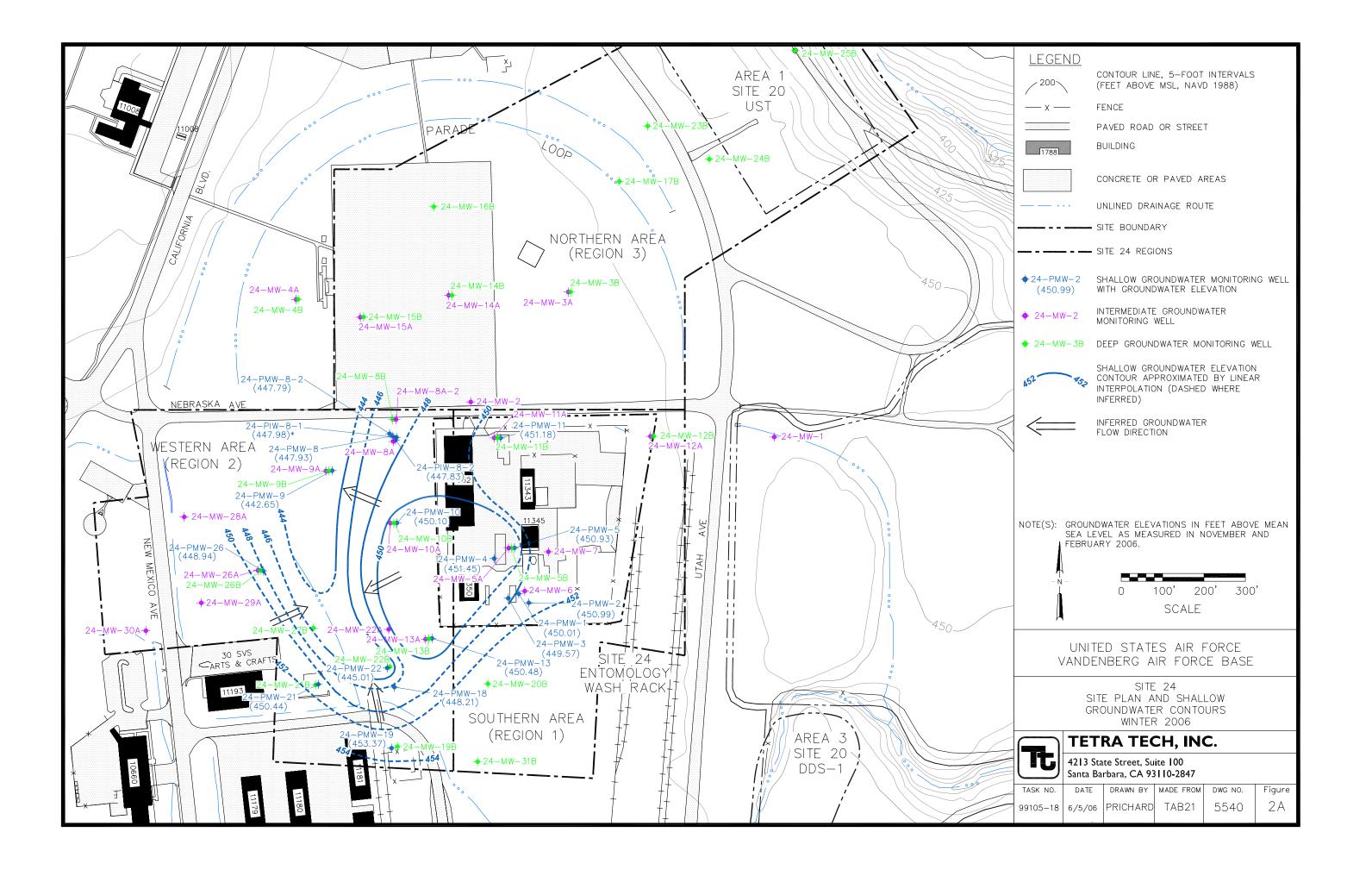
U.S. Air Force

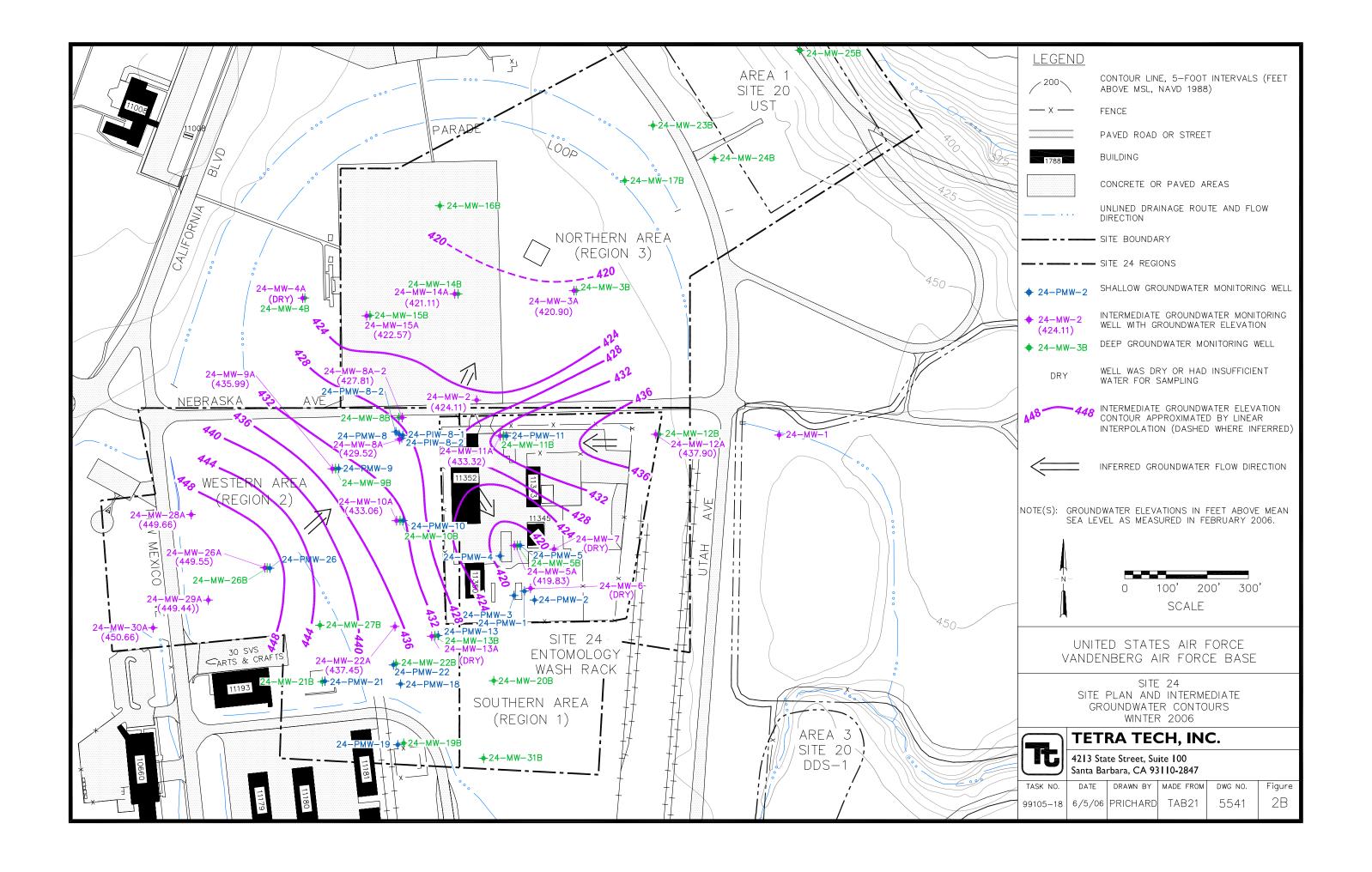
2002 Headquarters Thirtieth Space Wing, Vandenberg AFB, California. *Hazardous Waste Management Plan, 30 SW 32-7043-A, Change 1.* HQ 30th Space Wing, Vandenberg Air Force Base, California 93437-6261. April.

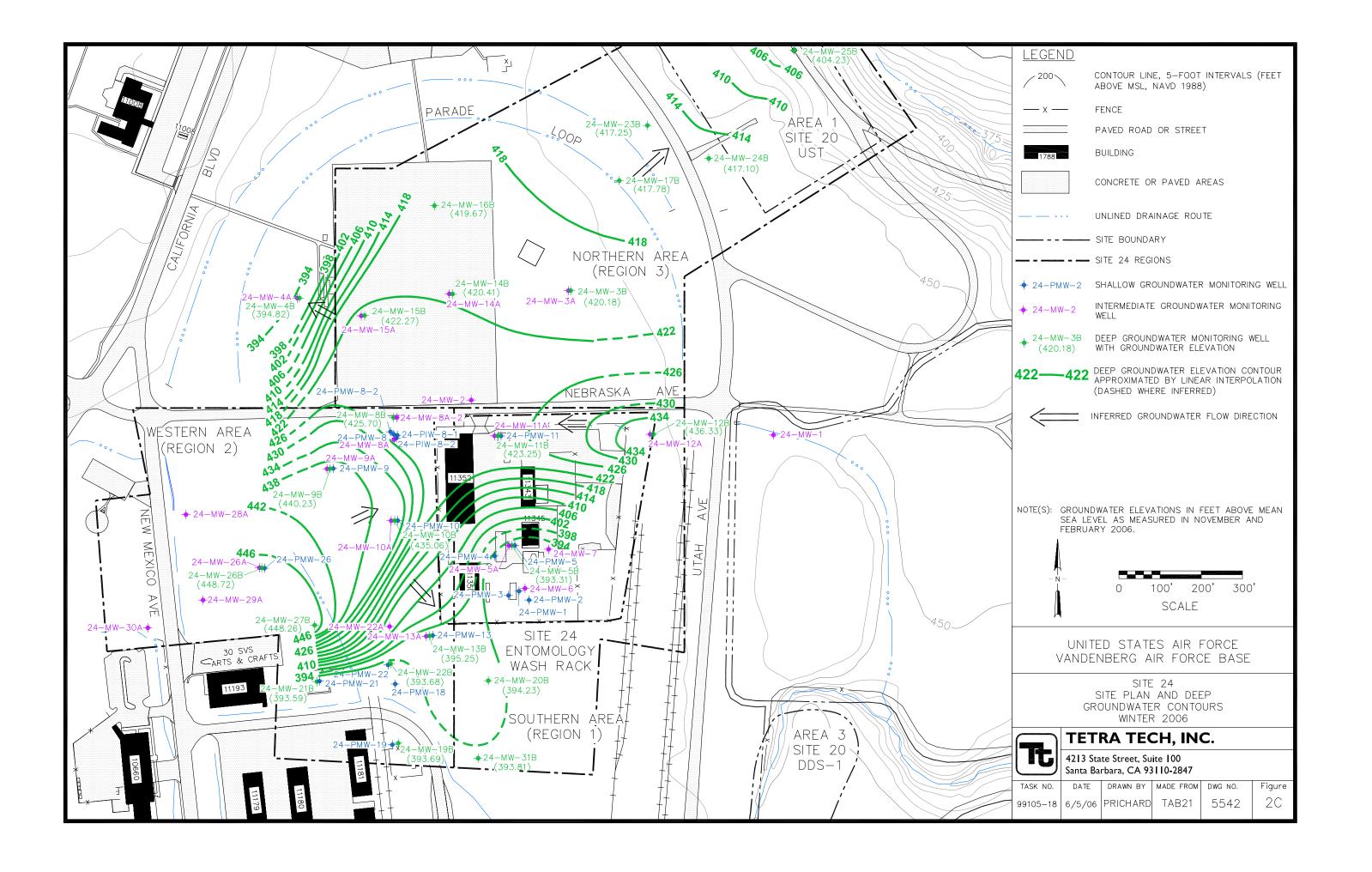
Versar, Inc.

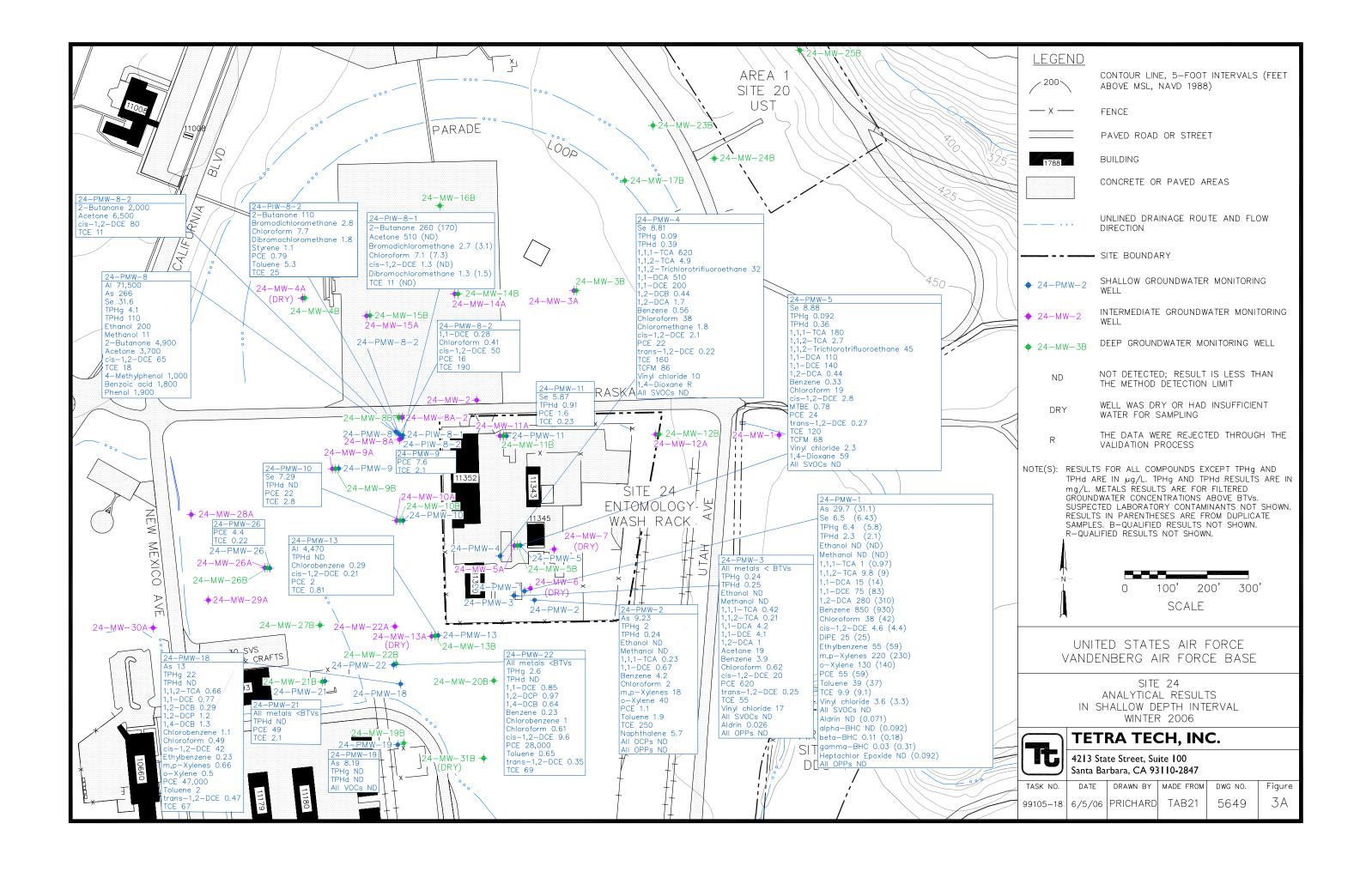
2006 Remedial Program Managers Presentation, Site 24, Vandenberg Air Force Base, California. 22 February 2006.

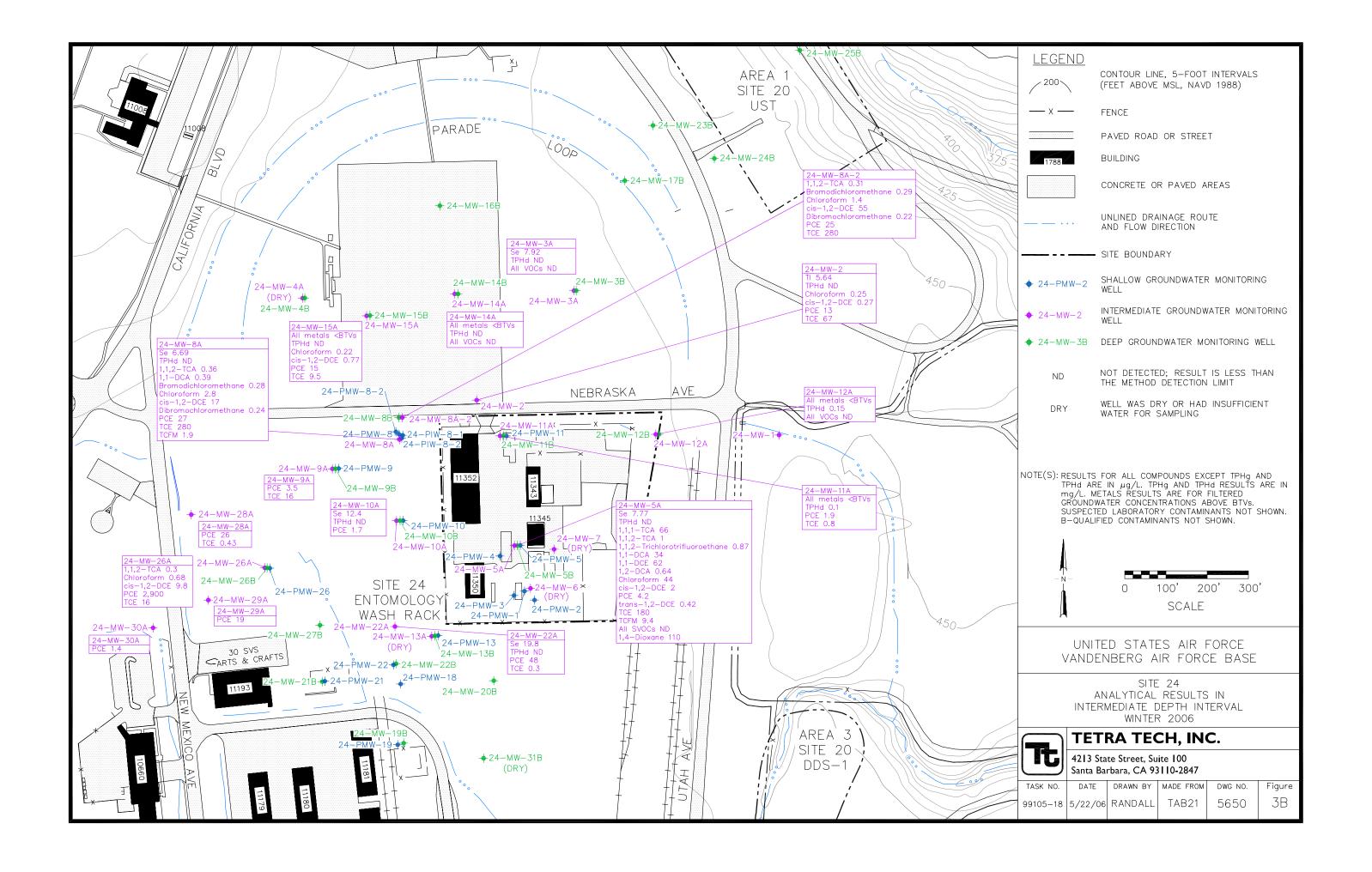


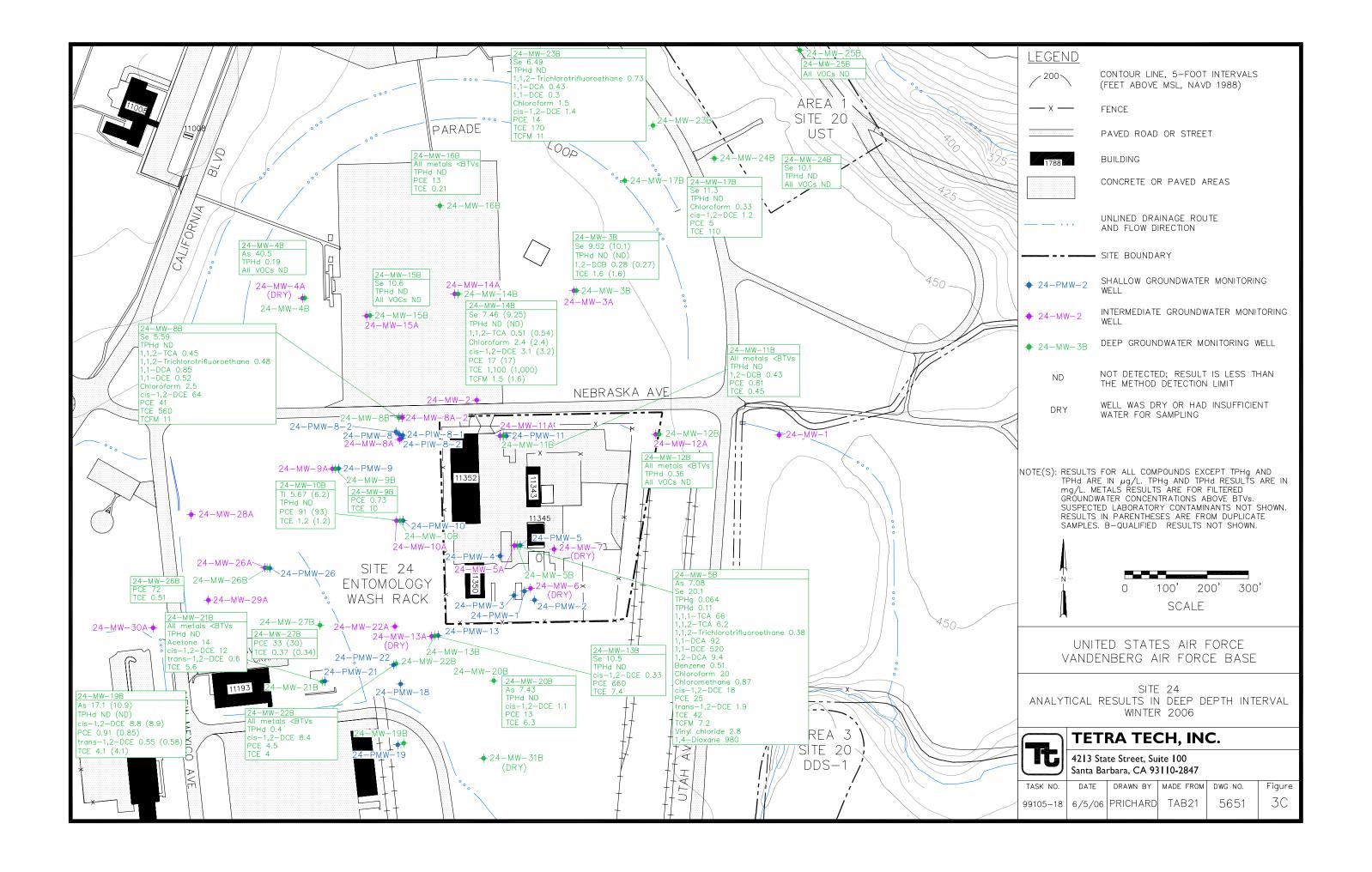


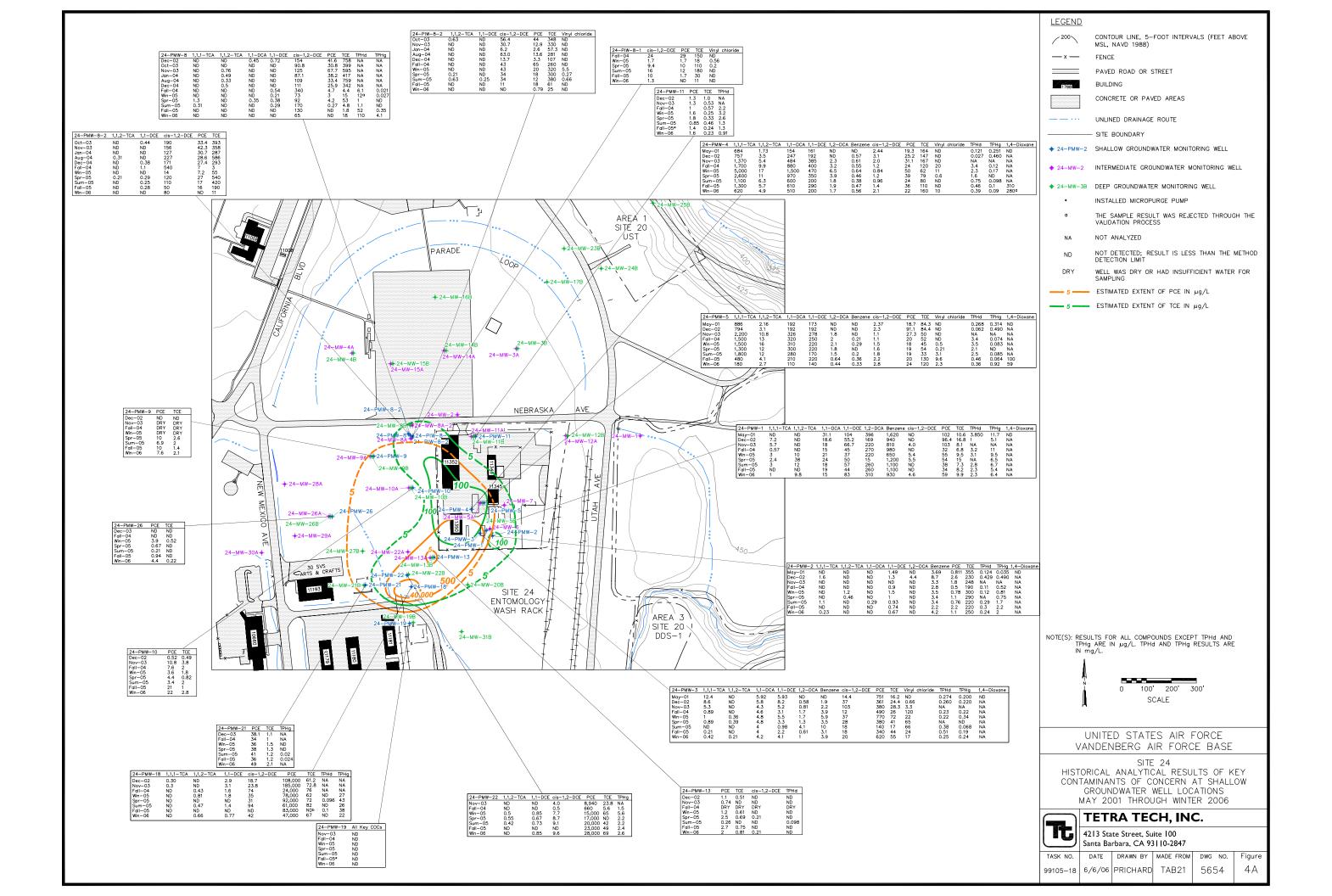


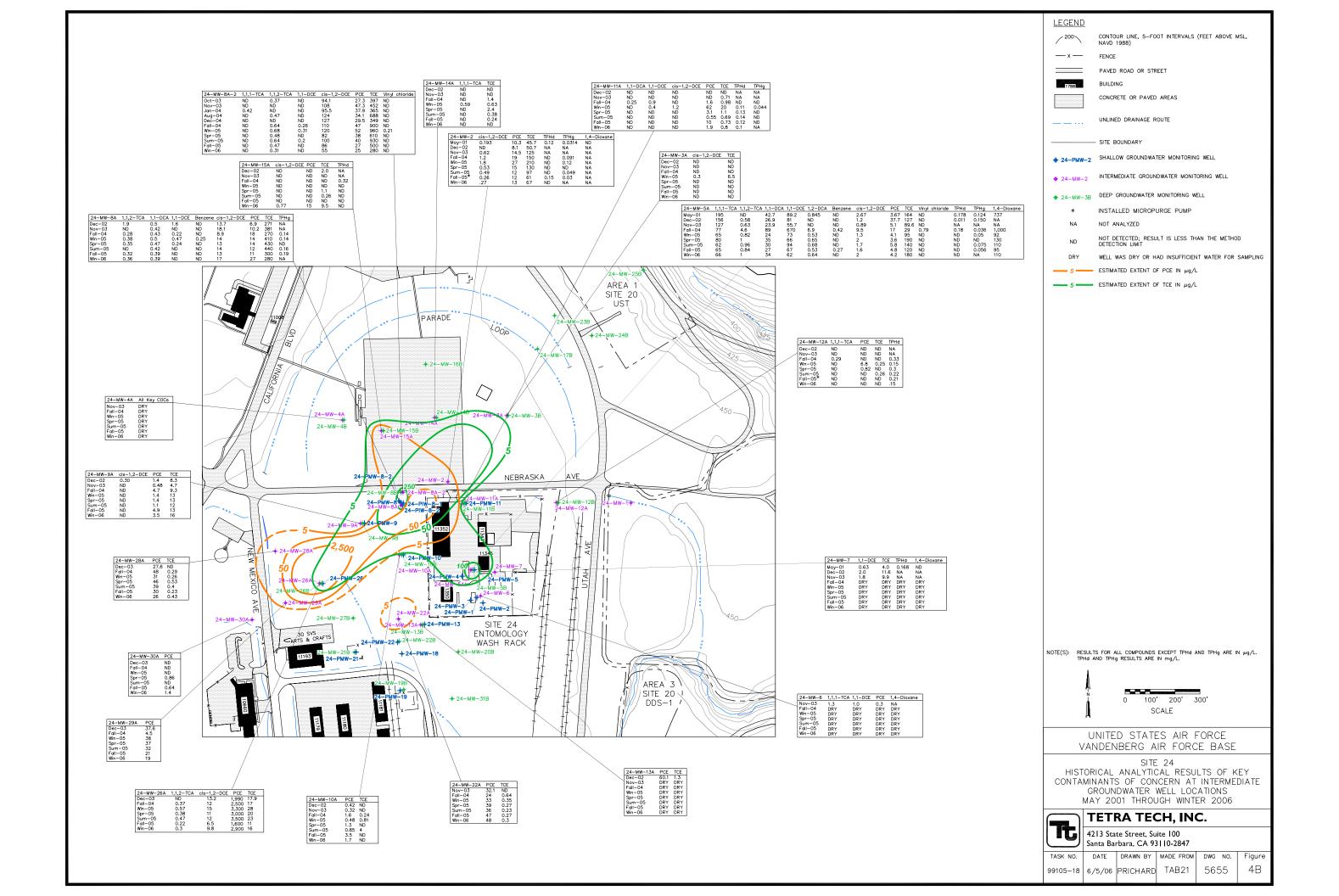












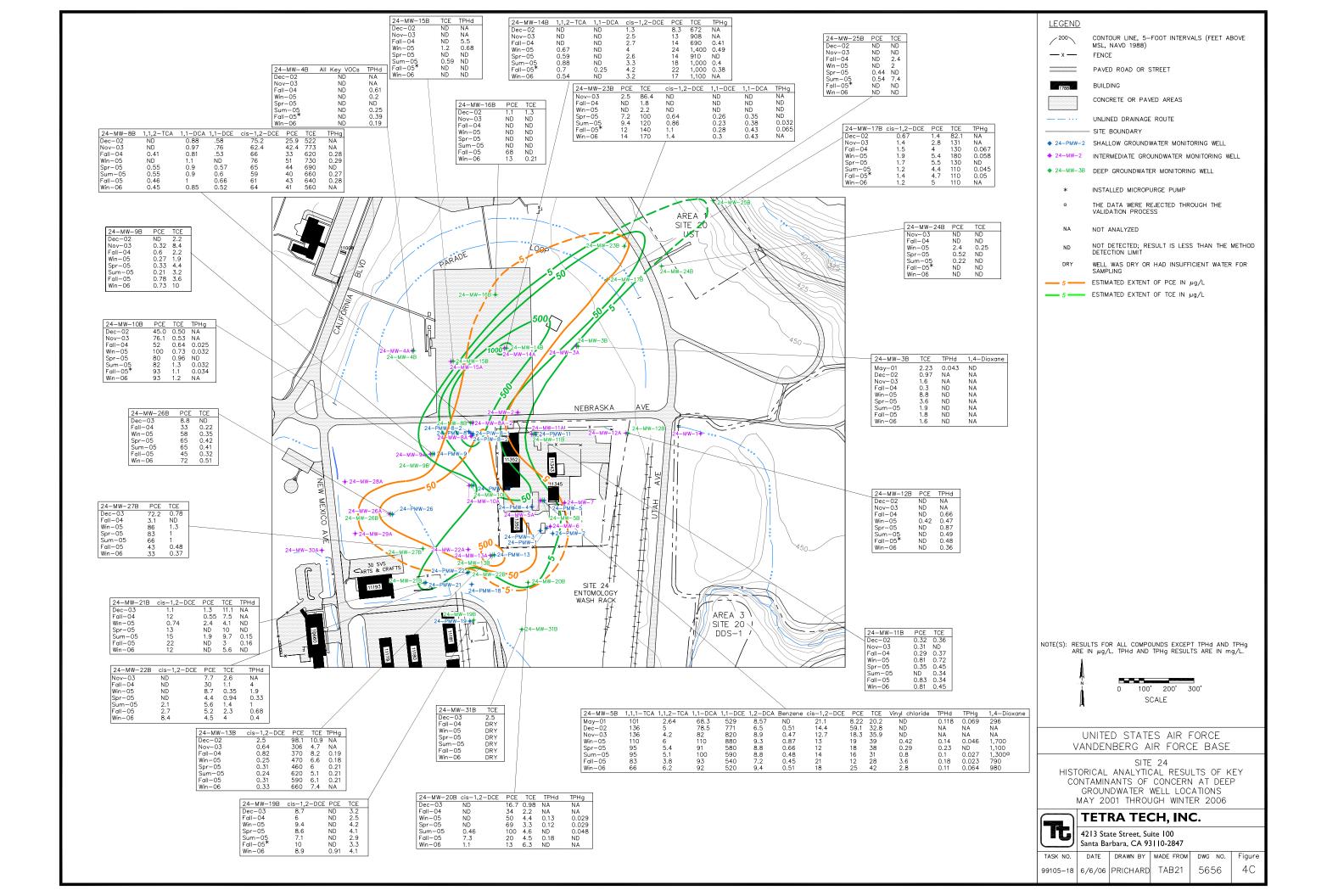


Table 1 Groundwater Elevations Site 24 (Entomology Wash Rack) Vandenberg AFB, California

	Top of Casing		Groundwater				
	Elevation	Date	Depth _	Gro	undwater Eleva	tion (feet above m	sl)
Monitoring Well	(feet above msl)	Measured	(feet below TOC)	Winter 2006	Fall 2005	Summer 2005	Spring 200
		Winter 2006	Winter 2006				
Shallow Zone Wells							
24-PMW-1	459.69	01-Feb-06	9.68	450.01	449.87	450.15	450.11
24-PMW-2	459.18	01-Feb-06	8.19	450.99	451.02	451.82	451.72
24-PMW-3	459.75	01-Feb-06	10.18	449.57	449.73	450.14	450.04
24-PMW-4	458.43	01-Feb-06	6.98	451.45	451.73	452.73	453.15
24-PMW-5	458.28	01-Feb-06	7.35	450.93	451.29	451.86	452.25
24-PMW-8	459.42	01-Feb-06	11.49	447.93	448.39	448.94	449.65
24-PMW-8-2	459.45	01-Feb-06	11.66	447.79	448.12	448.90	449.56
24-PIW-8-1	459.43	01-Feb-06	11.45	447.98	447.75	449.07	449.83
24-PIW-8-2	459.11	01-Feb-06	11.28	447.83	448.07	449.16	449.68
24-PMW-9	459.86	01-Feb-06	17.21	442.65	444.36	447.02	446.94
24-PMW-10	458.87	01-Feb-06	8.77	450.10	449.67	451.23	453.30
24-PMW-11	458.04	01-Feb-06	6.86	451.18	450.73	451.23	451.70
24-PMW-13	459.83	01-Feb-06	9.35	450.48	452.26	453.03	454.01
24-PMW-18	459.31	01-Feb-06	11.10	448.21	447.72	448.90	449.50
24-PMW-19	460.27	01-Feb-06	6.90	453.37	453.32	454.54	455.66
24-PMW-21	460.70	01-Feb-06	10.26	450.44	451.14	452.50	447.42
24-PMW-22	459.29	01-Feb-06	14.28	445.01	445.10	445.90	444.18
24-PMW-26	460.72	01-Feb-06	11.78	448.94	450.36	450.38	449.41
Intermediate Zone V	Vells						
24-MW-2	459.57	01-Feb-06	35.46	424.11	424.30	424.16	423.84
24-MW-3A	458.15	01-Feb-06	37.25	420.90	420.91	421.03	420.54
24-MW-4A	460.40	01-Feb-06	DRY	DRY	DRY	DRY	DRY
24-MW-5A	457.99	01-Feb-06	38.16	419.83	419.78	419.80	419.78
24-MW-6 ^a	459.39	01-Feb-06	DRY	DRY	DRY	DRY	DRY
24-MW-7	459.46	01-Feb-06	DRY	DRY	DRY	DRY	DRY
24-MW-8A	459.23	01-Feb-06	29.71	429.52	429.27	429.57	429.28
24-MW-8A-2	459.23	01-Feb-06	31.42	427.81	428.01	428.18	427.89
24-MW-9A	459.99	01-Feb-06	24.00	435.99	438.99	440.44	437.88
24-MW-10A	459.01	01-Feb-06	25.95	433.06	431.68	432.31	431.66
24-MW-11A	457.98	01-Feb-06	24.66	433.32	429.38	433.12	428.12
24-MW-12A	457.43	01-Feb-06	19.53	437.90	438.85	439.83	437.85
24-MW-13A	459.70	01-Feb-06	DRY	DRY	DRY	DRY	DRY
24-MW-14A	458.42	01-Feb-06	37.31	421.11	421.04	421.17	421.19
24-MW-15A	459.21	01-Feb-06	36.64	422.57	422.55	422.46	422.28
24-MW-22A	459.50	01-Feb-06	22.05	437.45	437.82	437.96	437.15
24-MW-26A	460.42	01-Feb-06	10.87	449.55	449.68	449.92	449.24
24-MW-28A	461.23	01-Feb-06	11.57	449.66	450.40	450.60	450.31
24-MW-29A	460.89	01-Feb-06	11.45	449.44	450.22	450.69	450.20
24-MW-30A	459.59	01-Feb-06	8.93	450.66	450.98	451.40	451.29

Table 1 Groundwater Elevations Site 24 (Entomology Wash Rack) Vandenberg AFB, California

	Top of Casing		Groundwater				
	Elevation	Date	Depth _		undwater Eleva	tion (feet above m	sl)
Monitoring Well	(feet above msl)	Measured	(feet below TOC)	Winter 2006	Fall 2005	Summer 2005	Spring 2005
	,	Winter 2006	Winter 2006				
Deep Zone Wells							
24-MW-3B	458.07	01-Feb-06	37.89	420.18	420.17	420.33	419.96
24-MW-4B	460.40	01-Feb-06	65.58	394.82	394.75	394.72	394.63
24-MW-5B	458.35	01-Feb-06	65.04	393.31	393.24	393.24	393.15
24-MW-8B	459.24	01-Feb-06	33.54	425.70	425.66	425.75	425.41
24-MW-9B	459.95	01-Feb-06	19.72	440.23	440.18	439.81	438.95
24-MW-10B	458.88	01-Feb-06	23.82	435.06	435.01	434.95	434.39
24-MW-11B	457.86	01-Feb-06	34.61	423.25	423.55	423.35	423.03
24-MW-12B	457.33	01-Feb-06	21.00	436.33	437.11	437.87	437.07
24-MW-13B	459.70	01-Feb-06	64.45	395.25	395.09	395.02	394.87
24-MW-14B	458.36	01-Feb-06	37.95	420.41	420.36	420.40	420.08
24-MW-15B	459.19	10-Mar-06	36.92	422.27	421.93	422.09	421.69
24-MW-16B	458.48	01-Feb-06	38.81	419.67	420.67	419.69	419.27
24-MW-17B	456.11	01-Feb-06	38.33	417.78	417.77	417.96	417.62
24-MW-19B	460.12	01-Feb-06	66.43	393.69	393.61	393.62	393.57
24-MW-20B	459.55	01-Feb-06	65.32	394.23	394.20	394.15	394.07
24-MW-21B	460.22	01-Feb-06	66.63	393.59	393.50	393.57	393.49
24-MW-22B	459.33	01-Feb-06	65.65	393.68	391.63	393.62	393.51
24-MW-23B	455.09	01-Feb-06	37.84	417.25	417.24	417.48	417.13
24-MW-24B	452.59	01-Feb-06	35.49	417.10	418.07	417.31	417.00
24-MW-25B	427.58	01-Feb-06	23.35	404.23	403.78	403.88	404.60
24-MW-26B	460.61	10-Mar-06	11.89	448.72	448.86	449.04	448.34
24-MW-27B	460.46	01-Feb-06	12.20	448.26	448.70	448.96	448.35
24-MW-31B	459.60	01-Feb-06	65.79	393.81	393.80	393.79	393.71

Definition(s):

msl - mean sea level TOC - top of casing

Note(s):

a - TOC surveyed prior to final well box construction. Data accurate to within 1 to 3 inches.

This well will require a re-survey for accuracy to 0.01 inch.

Table 2
Water Quality Parameters
Fall 2005
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

Shallow Zone Sampling Location	24-PMW-1	24-PMW-2	24-PMW-3	24-PMW-4	24-PMW-5	24-PMW-8	24-PMW-8 24-PMW-8-2 24-PIW-8-1	24-PIW-8-1
Sample ID	V24PMW1	V24PMW2	V24PMW3	V24PMW4		V24PMW8	V24PMW82	V24PIW81
Collection Date	07-Mar-06	06-Mar-06	07-Mar-06	07-Mar-06	07-Mar-06		08-Mar-06 08-Mar-06	08-Mar-06
Field Parameters ¹ :						1		
Temperature (° Celsius)	17.81	18.42	17.81	18.46	17.83	19.62	18.64	19.50
Conductivity (µmhos/cm)	804	792	908	853	092	3,726	3,409	6.832
Hd	5.81	5.75	6.52	6.33	6.44	3.85	5.06	3.46
Turbidity (NTUs)	5.64	30.1	6.26	7.89	10.2	21.5	31.9	>200

Shallow Zone Sampling Location	24-PIW-8-2	24-PMW-9	24-PMW-10	24-PMW-10 24-PMW-11 24-PMW-13	24-PMW-13	24-PMW-18	24-PMW-18 24-PMW-19	24-PMW-21
Sample ID	V24PIW82	V24PMW9	V24PMW10	V24PMW11	V24PMW13	V24PMW18	V24PMW19	V24PMW21
Collection Date	08-Mar-06	08-Mar-06	08-Mar-06	10-Mar-06	07-Mar-06			09-Mar-06
Field Parameters ¹ :								
Temperature (° Celsius)	19.73	19.11	17.07	16.15	17.77	17.58	17.17	17.98
Conductivity (µmhos/cm)	7,481	347	595	705	337	260	1.138	066
Hd	3.50	6.72	6.88	6.33	92.9	6.93	6.99	6.28
Turbidity (NTUs)	>200	175	23.9	14.2	>200	63.4	30.2	13.9

Shallow Zone Sampling Location	24-PMW-22	24-PMW-22 24-PMW-26
Sample ID	V24PMW22	V24PMW22 V24PMW26
Collection Date	07-Mar-06	07-Mar-06 13-Mar-06
Field Parameters ¹ :		
Temperature (° Celsius)	18.07	18.27
Conductivity (µmhos/cm)	876	2,264
Hd	66.9	6.56
Turbidity (NTUs)	11.4	14.3

Table 2
Water Quality Parameters
Fall 2005
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

Intermediate Zone Sampling Location Sample ID	24-MW-2 V24MW2 06-Mar-06	24-MW-3A V24MW3A	24-MW-5A V24MW5A 07-Mar-06	24-MW-8A V24MW8A	24-MW-8A-2 V24MW8A2	24-MW-9A V24MW9A	24-MW-10A V24MW10A	24-MW-11A V24MW11A
Field Parameters ¹ :				20 1111 20	00-1111-00	00-17141-70	14-14141-00	02-141a1-00
Temperature (° Celsius)	14.35	20.75	NM^2	20.01	18.01	18.46	18.71	18.93
Conductivity (µmhos/cm)	098	1,720	NM^2	791	6.88	573	1,088	1,020
Hq	6.16	6.49	${ m NM}^2$	5.98	6.47	6.26	6.14	6.16
Turbidity (NTUs)	0.43	1.42	NM^2	6.17	16.5	28	46.2	9.65
Intermediate Zone Sampling Location	24-MW-12A	24-MW-14A	24-MW-15A	24-MW-22A	24-MW-26A	24-MW-28A	24-MW-29A	24-MW-30A
Sample ID	V24MW12A	V24MW14A	V24MW15A	V24MW22A	V24MW26A	V24MW28A	V24MW29A	V24MW30A
Collection Date	06-Mar-06	09-Mar-06	09-Mar-06	07-Mar-06	13-Mar-06	14-Mar-06	14-Mar-06	13-Mar-06
Field Parameters ¹ :								
Temperature (° Celsius)	17.75	19.85	20.35	16.73	19.26	20.34	19.95	19.51
Conductivity (µmhos/cm)	1,590	1085	1,587	1,193	1,533	2,947	1,622	2,236
Hd	6.41	6.07	6.31	6.11	00.9	6.26	5.83	6.07
Turbidity (NTUs)	3.21	20.0	151	9.88	23.9	27.0	52.0	39.1
1000								
Deep Zone Sampling Location	24-MW-3B	24-MW-4B	24-MW-5B	24-MW-8B	24-MW-9B	24-MW-10B	24-MW-11B	24-MW-12B
Sample ID	V24MW3B	V24MW4BM	V24MW5B	V24MW8B	V24MW9B	V24MW10B	V24MW11B	V24MW12B
Collection Date	07-Mar-06	10-Mar-06	07-Mar-06	08-Mar-06	07-Mar-06	06-Mar-06	09-Mar-06	03-Mar-06
Field Parameters ¹ :								
Temperature (° Celsius)	18.44	17.41	20.21	20.50	18.71	14.33	19.63	18.18
Conductivity (µmhos/cm)	1,266	2,137	854	762	840	1,286	973	1,205
$_{ m Hd}$	6.16	5.53	5.61	6.24	5.93	5.92	6.56	6.19
Turbidity (NTUs)	3.46	40.4	1.81	7.6	2.4	1.15	51.2	2.85

IRP Site 24 (Entomology Wash Rack) Vandenberg AFB, California Water Quality Parameters Fall 2005

Deep Zone Sampling Location	24-MW-13B	24-MW-14B	24-MW-14B 24-MW-15B 24-MW-16B 24-MW-17B 24-MW-19B 24-MW-20B	24-MW-16B	24-MW-17B	24-MW-19B	24-MW-20B	24-MW-21B
Sample ID	V24MW13B	V24MW14B	V24MW14B V24MW15B	V24MW16B	V24MW17B	V24MW19B	V24MW20B	V24MW21B
Collection Date	07-Mar-06	10-Mar-06	10-Mar-06 10-Mar-06	09-Mar-06	09-Mar-06 10-Mar-06 10-Mar-06	10-Mar-06	09-Feb-06	09-Mar-06
Field Parameters ¹ :	9							
Temperature (° Celsius)	18.74	19.92	19.83	21.58	18.24	18.20	${ m NM}^2$	17.83
Conductivity (µmhos/cm)	782	1,412	2,242	953	1,173	1,507	${ m NM}^2$	1,014
Hd	6.70	5.96	5.71	5.94	5.79	6.35	${ m NM}^2$	6.45
Turbidity (NTUs)	187	1.53	3.64	1.76	1.59	2.75	NM^2	11.4

Deep Zone Sampling Location	24-MW-22B	24-MW-23B	24-MW-24B	24-MW-22B 24-MW-23B 24-MW-24B 24-MW-25B 24-MW-26B 24-MW-27B	24-MW-26B	24-MW-27B
Sample ID	V24MW22B	V24MW23B	V24MW24B	V24MW22B V24MW23B V24MW24B V24MW25B V24MW26B V24MW27B	V24MW26B	V24MW27B
Collection Date	07-Mar-06	10-Mar-06	10-Mar-06	07-Mar-06 10-Mar-06 10-Mar-06 10-Mar-06 13-Mar-06 14-Mar-06	13-Mar-06	14-Mar-06
Field Parameters ¹ :						
Temperature (° Celsius)	18.66	17.42	17.74	15.86	19.20	19.38
Conductivity (µmhos/cm)	1,271	858	2,212	1,588	1,164	1,362
$^{ m Hd}$	6.22	6.02	5.75	5.71	5.84	5.90
Turbidity (NTUs)	>200	2.08	1.21	0.67	0.82	2.12

Definition(s):

 $\mu mhos/cm - micromhos \ per \ centimeter \\ NM - not \ measured$

- nephelometric turbidity unit NTO

Note(s):

- Field parameters measured immediately prior to sampling. Field parameters for well 24-PMW-9 and 24-MW-15A were measured at time of sampling because these wells were purged dry prior to the first reading.
 - Water quality parameters were not measured due to insufficient water in the well.

<S24_T3_Win06_MET.xls> 6/7/2006

Table 3
Metals in Groundwater
Winter 2006
EPA Methods SW6010B and SW7470A (μg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

Sample Location					allow e Wells	24-PMW-1	24-PMW-1	24-PMW-2	24-PMW-3	24-PMW-4	24-PMW-5	24-PMW-8
Sample ID						V24PMW1F	V99W630F(D)	V24PMW2F	V24PMW3F	V24PMW4F	V24PMW5F	V24PMW8F
Collection Date					Z	07-Mar-06	07-Mar-06	06-Mar-06	07-Mar-06	07-Mar-06	07-Mar-06	08-Mar-06
			Primary									
Dissolved Metals	MDL ¹	PQL^{1}	MCL	BTV								
Aluminum	15	09	1,000	1,200		60 U g	60 U g	74.4 J q	8 O O9	g U 09	60 U g	71.500 g
Antimony ²	40	100	9	10		40 U g	40 U g	40 U g	40 U g	40 U g	40 U g	Þ
Arsenic	4	10	10	7		29.7 8	31.1 8	9.23 J g	5.68 J g	5 U g	5 U g	
Cadmium	1	5	2	5		_	2 U g	2 U g	2 U g	2 U g	$2 \log$	n
Selenium ²	5	10	20	3		6.5 J q	6.43 J q	14.8 B a	5 U g	8.81 J g	8.88 J q	31.6 g
Thallium ²	5	10	7	1		6.13 BJ a,q	5 U g	5 U g	5 U g	5 U g	5 U g	D
					w ells							
Sample Location					M ·	24-PMW-10	24-PMW-11	24-PMW-13	24-PMW-18	24-PMW-19	24-PMW-21	24-PMW-22
Sample ID						V24PMW10F	V24PMW11F	V24PMW13F	V24PMW18F	V24PMW19F	V24PMW21F	V24PMW22F
Collection Date					Z	08-Mar-06	10-Mar-06	07-Mar-06	09-Mar-06	10-Mar-06	09-Mar-06	07-Mar-06
			Primary					:				
Dissolved Metals	MDL^{1}	PQL^{1}	MCL	BTV								
Aluminum	15	09	1,000	1,200		69.3 J q	8 O O 8	4,470 g	1,030 g	750 g	60 U g	84.9 J q
Antimony ²	40	100	9	10		40 U g	40 U g	40 U g	40 U g	40 U g	40 U g	40 U g
Arsenic	4	10	10	7		5 U g	5 U g	6.08 J q	C	8.19 J q	5 U g	5.11 J g
Cadmium		5	2	5		2 U g	2 Ug	2 U g	2 U g	2 U g.	2 U g	2 U g
Selenium ²	5	10	20	3		7.29 J q	5.87 J q	5 Ug	5 Ug	5 U g	5 Ug	5 U g
Thallium ²	5	10	2	1		5 U g	5 U g	5 Ug	5 U g	5 U g	5 Ug	6.35 BJ a,q

Table 3
Metals in Groundwater
Winter 2006
EPA Methods SW6010B and SW7470A (μg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

24-MW-12A V24MW12AF 06-Mar-06			125 J q	40 U g	5 U g	2 U g	5 U g	5 U g
24-MW-11A 2 V24MW11AF V 09-Mar-06			60 U g	40 U g	5 U g	2 U g	5 U g	5 U g
24-MW-10A V24MW10AF 14-Mar-06			g U 09	40 U g	5 U g	2 U g	12.4 %	5 U g
24-MW-8A V24MW8AF 08-Mar-06			8 O O g	40 U g	5 U g	2 U g	6.69 J q	5.6 BJ a,q
24-MW-5A V24MW5AF 07-Mar-06			60 U g	40 U g	5 Ug	2 U g	7.77 J q	5 U g
24-MW-3A V24MW3AF 08-Mar-06			60 U g	40 U g	5 U g	2 U g	7.92 J q	5 U g
24-MW-2 V24MW2F 06-Mar-06			80 U g	40 U g	5 U g	2 U g	S BJ a,q	5.64 J q
Intermediate Zone Wells		7	0					
		BT	1,200	10	7	2	3	-
	Primary	MCL	1,000	9	10	2	50	7
		PQL^{1}	09	100	10	2	10	10
		MDL ¹		40	4	-	5	5
Sample Location Sample ID Collection Date		Dissolved Metals		Antimony ²	Arsenic	Cadmium	Selenium ²	Thallium ²

					isit sllə			
Sample Location					м э	24-MW-14A	24-MW-15A	24-MW-22A
Sample ID					ier no:	V24MW14AF	V24MW15AF	V24MW22AF
Collection Date					Z uj	09-Mar-06	09-Mar-06	07-Mar-06
			Primary					
Dissolved Metals	MDL^{1}	PQL^{1}	MCL	BTV				
Aluminum	15	09	1,000	1,200		60 U g	8 O O9	174 J g
Antimony ²	40	100	9	10		40 U g	40 U g	40 U g
Arsenic	4	10	10	7		5 U g	5 U g	5.02 J g
Cadmium	_	2	5	5		2 U g	2 Ug	2 U g
Selenium ²	5	10	50	3		5 U g .	5 U g	19.8 g
Thallium ²	5	10	2	1		5 U g	5 Ug	5 Ug

Table 3
Metals in Groundwater
Winter 2006
EPA Methods SW6010B and SW7470A (μg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

24-MW-10B V99W627 (D) 06-Mar-06	60 U g 40 U g 5 U g 2 U g 16.6 B a 6.2 J q	24-MW-16B V24MW16BF 09-Mar-06	60 U g 40 U g 5 U g 5 U g 5 U g
24-MW-10B V24MW10BF 06-Mar-06	60 Ug 40 Ug 5 Ug 2 Ug 15.1 Ba 567 Jq	24-MW-15B V24MW15BF 10-Mar-06	60 U g 40 U g 5 U g 2 U g 10.6 g
24-MW-8B V24MW8BF 08-Mar-06	60 U g 40 U g 5 U g 2 U g 5.39 J q 5 U g	24-MW-14B V99W633(D) 10-Mar-06	60 U g 40 U g 5 U g 2 U g 925 J q 5 U g
24-MW-5B V24MW5BF 07-Mar-06	60 U g 40 U g 7.08 J q 2.91 J q 5 U g	24-MW-14B V24MW14BF 10-Mar-06	60 U g 40 U g 5 U g 2 U g 7.46 J q 5 U g
24-MW-4B V24MW4BF 10-Mar-06	145 J q 40 U g 40.5 g 2 U g 5 U g	24-MW-13B V24MW13BF 07-Mar-06	60 U g 40 U g 5 U g 2 U g 10.5 g
24-MW-3B V99W631F (D) 07-Mar-06	60 U g 40 U g 5 U g 2 U g 5 U g 5 U g	24-MW-12B V24MW12BF 06-Mar-06	81 J q 40 U g 5 U g 2 U g 5 U g
24-MW-3B V24MW3BF 07-Mar-06	60 U g 40 U g 5 U g 2 U g 9.52 J q 5 U g	24-MW-11B V24MW11BF 09-Mar-06	60 U g 40 U g 5.68 J q 2 U g 5 U g 5 U g
ono.S qood slloW		Deep Zone	
	BTV 1,200 10 7 7 5 3		BTV 1,200 10 7 7 5 3
	Primary MCL 1,000 6 6 10 5 5 5 20 2		Primary MCL 1,000 6 10 5 5
	PQL ¹ 60 100 10 5 10 10		PQL ¹ 60 100 100 5 10
	MDL ¹ 15 40 4 1 5 5		MDL ¹ 15 40 4 1 5 5
Sample Location Sample ID Collection Date	Dissolved Metals Aluminum Antimony ² Arsenic Cadmium Selenium ² Thallium ²	Sample Location Sample ID Collection Date	Dissolved Metals Aluminum Antimony ² Arsenic Cadmium Selenium ² Thallium ²

Table 3
Metals in Groundwater
Winter 2006
EPA Methods SW6010B and SW7470A (µg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

Sample Location Sample ID Collection Date Dissolved Metals M Aluminum Antimony ²	MDL ¹ 15 40	PQL ¹ 60	Primary MCL 1,000	BTV 1,200	Deep Zon	24-MW-17B V24MW17BF 10-Mar-06 60 U g 40 U g	24-MW-19B V24MW19BF 10-Mar-06 60 U g 40 U g	24- V999'	24-MW-20B V24MW20BF 09-Mar-06 60 U g 40 U g	24-MW-21B V24MW21BF 09-Mar-06 60 U g 40 U g	24-MW-22BF V24MW22BF 07-Mar-06 60 U g 40 U g	24-MW-23B V24MW23BF 10-Mar-06 60 U g 40 U g
	4 L & &	10 5 10	10 5 2	r & & -		5 U g 2 U g 11.3 g 5 U g	7.1 J f 2 U g 5 U g 62 BJa.a	10.9 J f 2 U g 5 U g 5 U g	7.43 J q 2 U g 5 U g 5 U g	2 C C C C C C C C C C C C C C C C C C C	5.4 J q 2 U g 5 U g 5 U s	5 U g 2 U g 6.49 J q 5 U s

Zone 24-MW-24B V24MW24BF 10-Mar-06		BTV	1,200 60 U g	10 40 U g	7 5 U.B	5 2 U g	3 10.1 g	1 5 U g
	Primary	MCL	1,000	9	10	5	50	2
		PQL^{1}	09	100	10	5	10	10
		MDL^{1}	15	40	4	1	5	5
Sample Location Sample ID Collection Date		Dissolved Metals	Aluminum	Antimony ²	Arsenic	Cadmium	Selenium ²	Thallium ²

EPA Methods SW6010B and SW7470A (µg/L) IRP Site 24 (Entomology Wash Rack) Vandenberg AFB, California Metals in Groundwater Winter 2006

Data Validity Qualifier(s):

- The sample result is less than 5 times (10 times for common organic laboratory contaminants) the blank contamination. The result is considered not to have originated from the environmental sample, because cross-contamination is suspected.
 - The analyte was positively identified and the result is usable; however, the analyte concentration is an estimated value.
- The analyte was not detected at or above the MDL.

Data Validity Comment(s):

- The analyte was found in the method blank.
- The duplicate/replicate sample's relative percent difference was outside the control limit.
- The data met prescribed criteria as detailed in the QAPP.
 - The analyte detection was below the PQL.

Definition(s):

- background threshold value BTV (D) MCL MDL
 - duplicate sample
- maximum contaminant level
- method detection limit
 - micrograms per liter

 - not applicable
- practical quantitation limit
- Quality Assurance Project Plan μg/L N/A PQL QAPP

Note(s):

Bold type indicates results that were above the MCL.

- Shading indicates results that were above the 95th percentile BTV.
 - Values from QAPP Addendum (Tetra Tech 2004).
- The BTV was less than the method detection limit for this metal.

Table 4 TPH, Ethanol, and Methanol in Groundwater Winter 2006

EPA Method SW8015B (mg/L) IRP Site 24 (Entomology Wash Rack) Vandenberg AFB, California

Sample Location	Sample ID	Collection Date	,	TPH as Gasoline	TPH as Diesel	Ethanol	Methan
Location				0.65			
			MDL ^a	0.02	0.19	0.25	0.25
			PQL ^a	0.1	1.0	0.5	0.5
Shallow Zone V							
24-PMW-1	V24PMW1	07-Mar-06		6.4 g	2.3 J b	0.5 U g	0.5 U g
24-PMW-1	V99W630 (D)	07-Mar-06		5.8 g	2.1 J b	0.5 U g	0.5 U g
24-PMW-2	V24PMW2	06-Mar-06		2 g	0.24 J b, q	0.5 U g	0.5 U g
24-PMW-3	V24PMW3	07-Mar-06		0.24 g	0.25 J b, q	0.5 U g	0.5 U g
24-PMW-4	V24PMW4	07-Mar-06		0.09 J q	0.39 J b, q	NA	NA
24-PMW-5	V24PMW5	07-Mar-06		0.092 J q	0.36 J b, q	NA	NA
24-PMW-8	V24PMW8	08-Mar-06		4.1^{b} g	110 J b	200 g	11
24-PMW-10	V24PMW10	08-Mar-06		NA	0.096 UJ b	NA	NA
24-PMW-11	V24PMW11	10-Mar-06		NA	0.91 J q	NA	NA
24-PMW-13	V24PMW13	07-Mar-06		NA	0.099 UJ b	NA	NA
24-PMW-18	V24PMW18	09-Mar-06		22 ^c g	0.094 UJ b	NA	NA
24-PMW-19	V24PMW19	10-Mar-06		0.02 U g	0.095 U g	NA	NA
24-PMW-21	V24PMW21	09-Mar-06		NA	0.099 UJ b	NA	NA
24-PMW-22	V24PMW22	07-Mar-06		2.6° g	0.1 UJ b	NA	NA
Intermediate Zo	one Wells						
24-MW-2	V24MW2	06-Mar-06		NA	0.095 UJ b	NA	NA
24-MW-3A	V24MW3A	08-Mar-06		NA	0.096 UJ b	NA	NA
24-MW-5A	V24MW5A	07-Mar-06		NA	0.097 UJ b	NA	NA
24-MW-8A	V24MW8A	08-Mar-06		NA	0.095 UJ b	NA	NA
24-MW-10A	V24MW10A	14-Mar-06		NA	0.1 UJ b	NA	NA
24-MW-11A	V24MW11A	09-Mar-06		NA	0.1 J b, q	NA	NA
24-MW-12A	V24MW12A	06-Mar-06		NA	0.15 J b, q	NA	NA
24-MW-14A	V24MW14A	09-Mar-06		NA	0.1 UJ b	NA	NA
24-MW-15A	V24MW15A	09-Mar-06		NA	0.097 UJ b	NA	NA
24-MW-22A	V24MW13A V24MW22A	07-Mar-06		NA NA	0.097 UJ b	NA NA	NA NA
Deep Zone Well		07-1 41a1 -00		11/1	0.075 03 0	IVA	INA
24-MW-3B	V24MW3B	07-Mar-06		NA	0.094 UJ b	NA	NA
24-MW-3B	V99W631 (D)	07-Mar-06		NA	0.097 UJ b	NA NA	NA NA
24-MW-4B	V24MW4BM	10-Mar-06		NA	0.19 J q	NA	NA NA
24-MW-5B	V24MW5B	07-Mar-06		0.064 J q	0.13 J q 0.11 J b, q	NA	NA
24-MW-8B	V24MW8B	08-Mar-06		NA NA	0.096 UJ b	NA	NA
24-MW-10B	V24MW10B	06-Mar-06		NA	0.1 UJ b	NA	NA
24-MW-10B	V99W627 (D)	06-Mar-06		NA	0.096 UJ b	NA	NA
24-MW-11B	V24MW11B	09-Mar-06		NA	0.097 UJ b	NA	NA
24-MW-12B	V24MW12B	06-Mar-06		NA	0.36 J b, q	NA	NA
24-MW-13B	V24MW13B	07-Mar-06		NA	0.098 UJ b	NA	NA
24-MW-14B	V24MW14B	10-Mar-06		NA	0.098 UJ b	NA	NA
24-MW-14B	V99W633 (D)	10-Mar-06		NA	0.095 UJ b	NA	NA
24-MW-15B	V24MW15B	10-Mar-06		NA	0.097 UJ b	NA	NA
24-MW-16B	V24MW16B	09-Mar-06		NA NA	0.099 UJ b	NA NA	NA NA
24-MW-17B	V24MW17B	10-Mar-06		NA	0.094 UJ b	NA	NA
24-MW-19B	V24MW19B	10-Mar-06		NA NA	0.096 U g	NA	NA NA
24-MW-19B	V99W634 (D)	10-Mar-06		NA	0.000 U g	NA	NA NA
24-MW-20B	V24MW20B	09-Mar-06		NA	0.1 UJ b	NA	NA NA
24-MW-21B	V24MW21B	09-Mar-06		NA	0.099 UJ b	NA	NA NA
24-MW-22B	V24MW22B	07-Mar-06		NA	0.4 J b, q	NA	NA NA
24-MW-23B	V24MW23B	10-Mar-06		NA NA	0.097 U g	NA NA	NA NA
24-MW-24B	V24MW24B	10-Mar-06		NA NA	0.097 U g	NA NA	NA NA

Table 4

TPH, Ethanol, and Methanol in Groundwater

Winter 2006

EPA Method SW8015B (mg/L) IRP Site 24 (Entomology Wash Rack)

Vandenberg AFB, California

Data Validity Qualifier(s):

- The analyte was positively identified and the result is usable; however, the analyte concentration is an estimated value.
- U The analyte was not detected at or above the MDL.
- UJ The analyte was not detected above the MDL; however, the MDL is uncertain and may be elevated above normal levels.

Data Validity Comment(s):

- b The surrogate spike recovery was outside quality control criteria.
- g The data met prescribed criteria as detailed in the QAPP.
- q The analyte detection was below the PQL.

Definition(s):

(D) - duplicate sample MDL - method detection limit

mg/L - milligrams per liter

NA - not analyzed

PQL - practical quantitation limit

QAPP - Quality Assurance Project Plan

TPH - total petroleum hydrocarbons

Note(s):

- Values from QAPP Addendum (Tetra Tech 2004).
- b TPHg detected in groundwater from this well were a result of chlorinated hydrocarbons in the gasoline range since no benzene, toluene, ethylbenzene, or xylenes were detected in groundwater from this well.
- TPHg detected in groundwater from this well were a result of chlorinated hydrocarbons in the gasoline range since the benzene concentration is very low compared to the very high TCE and/or PCE concentration.

1able 5
VOCs in Groundwater
Winter 2006
EPA Method SW8260B (μg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

Sample Location			ono Zvole zlioW	24-PMW-1	24-PMW-1	24-PMW-2	24-PMW-3	24-PMW-4	24-PMW-5	24-PMW-8
Sample ID Collection Date				V24PMW1 07-Mar-06	V99W630 (D) 07-Mar-06	V24PMW2 06-Mar-06	V24PMW3 07-Mar-06	V24PMW4 07-Mar-06	V24PMW5 07-Mar-06	V24PMW8 08-Mar-06
Analyte	MDLª PQI	MDL ^a PQL ^a Primary MCL	1							
111_TCA	010	000		-	0.07 1 %	-	2 1 670		100	_
1,1,1 TCA	0.28 1.0				, , , , , , , , , , , , , , , , , , ,	· =	0.21 J q	-	27 6	-
1,1,2-Trichlorotrifluoroethane	0.2 1.0	1,200		0.2 U g	0.2 U g	0.2 U g	0.2 U g	32 g	.; 45	10 C s
1,1-DCA	0.18 1.0	5		15 J b	14 J b	n	4.2 g		110 g	D
1,1-DCE				75 g	83 g	_	4.1		140 g	n
1,2-DCB	_			0.2 U g	0.2 U g	D	0.2 U g	-	0.2 U g	D
1,2-DCA				280 g	310 g	\supset	1 g		0.44 J q	D
1,2-DCP	0.25 0.5			0.2 U g	0.2 U g	D	D	0.2 U g	0.2 U g	n
1,4-DCB				0.2 U g		\supset	Þ	n	0.2 U g	Ω
2-Butanone				5 U g	5 U g	C	5 U g	\Box	5 U g	
Acetone				5 U g	D	n		כ	5 U g	3,700 g
Benzene	0.07 0.4			850 g	930 g		3.9 g	0.56 g	0.33 J q	D
Bromodichloromethane				0.2 U g	Ω	n	ֹם	n	n	Ω
Carbon disulfide				0.2 U g	0.2 U g	Ω	n	n	C	ר
Chlorobenzene	0.12 0.5			ר		n		n	0.2 U g	10 U g
Chloroform				38 g		ſ	-			n
Chloromethane				0.2 U g	0.2 U g	D	D		0.2 U g	Ω
cis-1,2-DCE				<u>-</u>	ī	D				
Dibromochloromethane				0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	n
DIPE				25 J b	_	0.2 U g	0.2 U g	D	0.2 U g	10 U g
Ethylbenzene						0.2 U g	0.2 U g	D	D	ר
m,p-Xylenes					230 g	-	0.5 U g	n	0.5 U g	D
MTBE				0.2 U g	\supset	D	0.2 U g	0.2 U g	0.78 J q	
o -Xylene				130 g	140 g		0.2 U g	D	0.2 U g	ר
Styrene				0.2 U g	Þ	0.2 U g	0.2 U g	Ω	0.2 U g	ב
PCE				55 g	59 g	J	620 g		24 g	n
Toluene				39 J b	37 J b	ſ	n	n	0.2 U g	ר
trans -1,2-DCE				0.2 U g	0.2 U g	0.2 U g	0.25 J q	ſ	0.27 J q	
TCE				9.9 J b	9.1 J b	250 g		160 g	120 g	<u>, </u>
TCFM	0.22 1.0			0.5 U g	0.5 U g		0.5 U g	g 98	g 89	
Vinyl chloride				- <u>}</u>		0.2 U g				10 U g
All other target analytes	N/A N/A			ND	UN	QN	QN	QN	ND	ND

Table 5
VOCs in Groundwater
Winter 2006
EPA Method SW8260B (µg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

			ano.X s							
Sample Location			woll Well	24-PMW-8-2	24-PIW-8-1	24-PIW-8-1	24-PIW-8-2	24-PMW-9	24-PMW-10	24-PMW-11
Sample ID Collection Date			sdS	v 24FM w82 08-Mar-06	V24F1W81 08-Mar-06	V99W632 (D) 08-Mar-06	V24PIW82 08-Mar-06	V24PMW9 08-Mar-06	V24PMW10 08-Mar-06	V24PMW11 10-Mar-06
Analyte	MDL" PQ	MDL ^a PQL ^a Primary MCL	ry							
1.1.1-TCA	0.19 1.0			ο [] δ	ο 11 ο	ν 11 50	ο 11 50	0.2 11 %	¥ 11 CU	ž 11 č0
1.1.2-TCA				2 C S	0.5 U g	0 S D & O	0 5.0 0 11 5.0	2.0 5.0 2 11 CO	9.7 CO	9. U. C.O.
1,1,2-Trichlorotrifluoroethane	0.2	0 1,200		3 O S		0.5 U g	0.5 U g	ם מ	0.2 C g O C 20) >
1,1-DCA				5 U g		0.5 U g	0.5 U g	0.2 U g	0.2 U g	ב
1,1-DCE				5 U g		0.5 U g	0.5 U g	0.2 U g	0.2 U g	n
1,2-DCB				5 U g	0.5 U g	0.5 U g	0.5 U g	0.2 U g	0.2 U g	n
1,2-DCA				5 U g	0.5 U g	0.5 U g	0.5 U g	0.2 U g	0.2 U g	ם
1,2-DCP	0.25 0.5			5 U g	0.5 U g	0.5 U g	0.5 U g	0.2 U g	0.2 U g	0.2 U g
1,4-DCB				5 U g	0.5 U g	0.5 U g	0.5 U g	0.2 U g	0.2 U g	0.2 U g
2-Butanone				2,000 g	190 g	170 g	110 g	5 U g	5 U g	5 U g
Acetone				6,500 g	g 89	12 U g	12 U g	5 U g	5 U g	5 U g
Benzene				5 U g	0.5 U g	0.5 U g	0.5 U g	0.2 U g	0.2 U g	0.2 U g
Bromodichloromethane	0.12 0.5			5 U g	2.7 g	3.1 g		0.2 U g	0.2 U g	0.2 U g
Carbon disulfide				5 U g	5.9 J f	3.5 J f	6.5 g	0.2 U g	0.2 U g	0.2 U g
Chlorobenzene				5 U g	0.5 U g	0.5 U g	0.5 U g	0.2 U g	0.2 U g	0.2 U g
Chloroform				5 U g	7.1 g	7.3 g	4.7 g	0.2 U g	0.2 U g	0.2 U g
Chloromethane				5 U g	Þ	0.5 U g	0.5 U g	0.2 U g	0.2 U g	D
cis -1,2-DCE				80 g	1.3 J q	0.5 U g	0.5 U g	0.2 U g	0.2 U g	0.2 U g
Dibromochloromethane				5 U g	1.3 g	1.5 g	1.8 g	0.2 U g	0.2 U g	0.2 U g
DIPE				5 U g	0.5 U g	0.5 U g	0.5 U g	0.2 U g	n	D
Ethylbenzene				5 U g	0.5 U g	0.5 U g	0.5 U g	0.2 U g	0.2 U g	n
m,p-Xylenes				12 U g	1.2 U g	1.2 U g	1.2 U g	0.5 U g	0.5 U g	D
MIBE	0.3 1.0	•		5 U g	0.5 U g	0.5 U g	0.5 U g	0.2 U g	0.2 U g	0.2 U g
o -Xylene				5 U g	0.5 U g	0.5 U g	0.5 U g	0.2 U g	0.2 U g	Þ
Styrene				5 U g	0.5 U g	0.5 U g	1.1 J q	0.2 U g	0.2 U g	0.2 U g
PCE				5 U g	0.5 U g	0.5 U g	0.79 J q	7.6 g	22 g	
Toluene				5 U g	0.5 U g	0.5 U g	5.3 g	0.2 U g	0.2 U g	0.2 U g
trans -1,2-DCE	0.27 1.0			5 U g	0.5 U g		0.5 U g	0.2 U g	0.2 U g	0.2 U g
ICE				11 Ј д			25 g	2.1 g	2.8 g	
ICFM				12 U g	n			0.5 U g	0.5 U g	0.5 U g
Vinyl chloride All other target analytes	0.36 I.0 N/A N/A	0.5 A/A		g O S	0.5 U g ND	0.5 U g	0.5 U g	0.2 U g	0.2 U g	0.2 U g
					Ġ.	4	GN	ON THE	QN	UN

Table 5
VOCs in Groundwater
Winter 2006
EPA Method SW8260B (µg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

Sample Location Sample ID				эпоХ wollt allaW	24-PMW-13 V24PMW13	24-PMW-18 V24PMW18	24-PMW-19 V24PMW19	24-PMW-21 V24PMW21	24-PMW-22 V24PMW22	24-PMW-26 V24PMW26
Collection Date				sus	07-Mar-06	09-Mar-06	10-Mar-06	09-Mar-06	07-Mar-06	13-Mar-06
Analyte	MDL ^a PQL ^a Primary MCL	OL" F	rimary MCL							
1,1,1-TCA	0.19	1.0	200			0.2 U g				
1,1,2-TCA	0.28	1.0	5		0.2 U g	0.66 J b, q	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,1,2-Trichlorotrifluoroethane	0.2	1.0	1,200			Ug	0.2 U g	0.2 U g	Ω	D
1,1-DCA	0.18	1.0	5			0.2 U g	0.2 U g	0.2 U g	0.2 U g	'n
1,1-DCE	0.32	1.0	9		.2 U	0.77 J b, q	0.2 U g	0.2 U g	ſ	0.2 U g
1,2-DCB	0.13	0.5	009		0.2 U g	0.29 J b, q	0.2 U g	0.2 U g	0.2 U g	'n
1,2-DCA	90.0	1.0	0.5		7 C	0.2 U g	0.2 U g	0.2 U g	0.2 U g	Þ
1,2-DCP	0.25	0.5	٠ ک		7 7	1.2 J b	0.2 U g	0.2 U g	<u> </u>)
1,4-DCB	0.11	0.1	5		0.2 U g	1.3 J b	0.2 U g	0.2 U g	0.64 J b, q	0.2 U g
2-Butanone	1:0	10	Z Z		5 U g	s U g	5 U g	S U g	5 U g	5 U g
Acetone	0.78	10	Υ X		5 U g	5 U g	D	S U g	5 U g	Þ
Benzene	0.02	0.4	_		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.23 J b, q	0.2 U g
Bromodichloromethane	0.12	0.5	100^{b}		0.2 U g	0.2 U g	0.2 U g	0.2 U g	n	0.2 U g
Carbon disulfide	0.48	1.0	N/A			0.3 J b, q	0.2 U g	0.2 U g	0.2 U g	D
Chlorobenzene	0.12	0.5	0/		0.29 J q	_	0.2 U g	0.2 U g	1 J b	0.2 U g
Chloroform	0.12	0.3	100^{b}		0.2 U g	ſ	0.2 U g		ſ	D
Chloromethane	0.32	1.0	N/A		0.2 U g					
cis-1,2-DCE	0.21	1.0	9			42 J b	0.2 U g	0.2 U g	9.6 J b	0.2 U g
Dibromochloromethane	0.25	0.5	100^{b}		0.2 U g					
DIPE	0.16	5.0	N/A		0.2 U g	Ω	0.2 U g	0.2 U g	0.2 U g	D
Ethylbenzene	0.12	1.0	300		0.2 U g	-	0.2 U g	0.2 U g	0.2 U g	0.2 U g
m,p-Xylenes	0.25	2.0	$1,750^{c}$		5 U	0.66 J b, q	0.5 U g	0.5 U g	n	n
MTBE	0.3	1.0	13		2 U	n	0.2 U g	0.2 U g	0.2 U g	n
o -Xylene	0.13	1.0	$1,750^{c}$		0.2 U g	Ţ	0.2 U g	0.2 U g	D	0.2 U g
Styrene	0.13	1.0	100		0.2 U g	D	0.2 U g	0.2 U g	D	0.2 U g
PCE	0.15	1.0	S		2 8	47,000 g	0.2 U g	49 g		4.4 g
Toluene	0.11	1.0	150		2 U	_	0.2 U g	0.2 U g	0.65 J b, q	0.2 U g
trans -1,2-DCE	0.27	1.0	10		0.2 U g	ſ	0.2 U g	0.2 U g	0.35 J b, q	0.2 U g
TCE	0.18	1.0	5		0.81 J q	67 J b, r	0.2 U g	2.1 g	69 J b, r	
TCFM	0.22	1.0	150		0.5 U g	0.5 U g	0.5 U g		n	0.5 U g
Vinyl chloride	0.36	1.0	0.5		7	ם ו	0.2 U g	0.2 U g	0.2 U g	
All other target analytes		N/A	N/A		QN	QN	ND	QN	QN	QN

Table 5
VOCs in Groundwater
Winter 2006
EPA Method SW8260B (µg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

		770;1								
Sample Location Sample ID			егте Опе М	24-MW-2 V24MW2	24-MW-3A V24MW3A	24-MW-5A V24MW5A	24-MW-8A V24MW8A	24-MW-8A-2 V24MW8A2	24-MW-9A V24MW9A	24-MW-10A V24MW10A
Collection Date	3		*******	06-Mar-06	08-Mar-06	07-Mar-06	08-Mar-06	08-Mar-06	07-Mar-06	14-Mar-06
Analyte	MDL ^a PQL ^a Primary MCL	Primary MCL								
1.1.1-TCA	0.19 1.0	200		0.2 U g	9 11 60	θ9	0.2 11 0	ο 11 ο	ρ 11 0	ο 11 ο
1,1,2-TCA	0.28 1.0	2		0.2 U g	0.2 U g		0.36 J a	0.31 J a	8 O 7:0	- -
1,1,2-Trichlorotrifluoroethane		1,200		0.2 U g	0.2 U g	0.87 J g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,1-DCA		. 5		0.2 U g	0.2 U g	34 8	0.39 J q	0.2 U g	D	0.2 U g
1,1-DCE		9		0.2 U g	0.2 U g	62 g	0.2 U g	0.2 U g	0.2 U g	n
1,2-DCB	0.13 0.5	009		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	D	0.2 U g
1,2-DCA		0.5		0.2 U g	0.2 U g	0.64 J q	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,2-DCP		2		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	Þ	Þ
1,4-DCB		2		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
2-Butanone		N/A		5 U g	5 U g	5 U g	5 U g	5 U g	5 U g	5 U g
Acetone		N/A		5 U g	5 U g	5 U g	5 U g	5 U g	\supset	5 U g
Benzene	0.07 0.4	-		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Bromodichloromethane		100 ^b		0.2 U g	0.2 U g	0.2 U g	0.28 J q	0.29 J q	0.2 U g	0.2 U g
Carbon disulfide		N/A		0.2 U g	0.2 U g	Þ	0.2 U g	0.2 U g	0.2 U g	D
Chlorobenzene		. 02		0.2 U g	0.2 U g	. 0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Chloroform		100°	0	0.25 J q	0.2 U g	44 g	2.8 g	1.4 g	0.2 U g	n
Chloromethane		N/A		0.2 U g	Þ	0.2 U g	'n	D	0.2 U g	0.2 U g
cis-1,2-DCE	0.21 1.0	9	0	27 J q	0.2 U g		17 g	55 g	0.2 U g	0.2 U g
Dibromochloromethane		100 ^b		0.2 U g	0.2 U g	0.2 U g	0.24 J q	0.22 J q	0.2 U g	0.2 U g
DIPE		N/A		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	Þ	D
Ethylbenzene		300		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
m,p -Xylenes		1,750°		0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g
MTBE		13		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
o-Xylene		1,750		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Styrene		100		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
PCE		5		13 g	0.2 U g	4.2 g	27 g	25 g	3.5 g	1.7 g
Toluene		150		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
trans -1,2-DCE		10		0.2 U g	0.2 U g	0.42 J q	0.2 U g	0.2 U g	0.2 U g	0.2 U g
TCE		2		g 29	0.2 U g	180 g	280 g	280 g	16 g	0.2 U g
TCFM		150		0.5 U g	0.5 U g		1.9 g	0.5 U g	0.5 U g	0.5 U g
Vinyl chloride	0.36 1.0	0.5								
All other target analytes		N/A		QN ND	QN	ND	QN QN	ND	QN	QN

Table 5
VOCs in Groundwater
Winter 2006
EPA Method SW8260B (µg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

Sample Location Sample ID Collection Date			аптээл] 7 энө.Х	24-MW-11A V24MW11A 09-Mar-06	24-MW-12A V24MW12A 06-Mar-06	24-MW-14A V24MW14A	24-MW-15A V24MW15A	24-MW-22A V24MW22A	24-MW-26A V24MW26A
Analyte	MDL ^a PC	MDL ^a PQL ^a Primary	ıry		on this	00-1011-00	00-1010	0/-10141-00	13-14141-00
1,1,1-TCA	0.19	.0 200			0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,1,2-TCA	0.28	.0 5		2 U	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.3 J q
1,1,2-Trichlorotrifluoroethane	0.2	.0 1,20	0	7 O	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,1-DCA				0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,1-DCE) ;	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,2-DCB 1,2-DCA	0.13	0.5 1.0 0.5		0.2 U g 0.2 U g	0.2 U gg	0.2 U g 0.2 II a	0.2 U g 0.2 II g	9.2 U g	0.2 U g 0.2 U g
1,2-DCP				2 0	0.2 U g	0.2 U g	0.2 U g	9.2 0.2.0 0.2 U g	0.2 U g
1,4-DCB				2 U	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
2-Butanone		10 N/A		5 U g	5 U g	5 U g	5 U g	5 U g	5 U g
Acetone				5 U g	5 U g	5 U g	5 U g	5 U g	5 U g
Benzene		0.4		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Bromodichloromethane				0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Carbon disulfide				0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Chlorobenzene				0.2 U g	0.2 U g	0.2 U g	ם	0.2 U g	0.2 U g
Chloroform				0.2 U g	0.2 U g	0.2 U g	_	0.2 U g	g 89.0
Chloromethane		1.0 N/A		0.2 U g	0.2 U g);	0.2 U g	0.2 U g	n
cis-1,2-DCE				 O	0.2 U g	0.2 U g	_	0.2 U g	8.6 50
Dibromochloromethane				7 7	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
DIPE				7 7	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Ethylbenzene		,	ç	; ;	0.2 U g	D :	0.2 U g) 	0.2 U g
m,p-Xylenes		_	,	0.5 U g	0.5 U g	 ;	0.5 U g	0.5 U g	0.5 U g
MIBE		1.0 1.5	٥,) ;	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
o-Aylenc Stand		-		 	20 F	 ;	8 O 7:0	8 O 7:0	9.0 Z.0
Styrene				~ > 7 0	0.2 U g);	0.2 U g	0.2 U g	0.2 U g
PCE				ر ب	 ⊃ ;	; ;	15 g	84 ; g	2,900 g
Toluene		1.0 150		7 7	;	⊃ ;	0.2 U g	0.2 U g	0.2 U g
trans -1,2-DCE				 	- ⊃ ;	- ;	0.2 U g	0.2 U g	0.2 U g
ICE				- -; ×:	; ;	> ;	9.5 g : g	- ;	
ICFM Vinyl chloride		1.0 150		0.5 0 8	0.5 U g	8 O CO	0.5 U g	0.5 U g	0.5 U g
All other target analytes	_	V. A.		, E	S	₽	~	~	8 O. 7.0 ND

1 able 5
VOCs in Groundwater
Winter 2006
EPA Method SW8260B (μg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

Sample Location				rmed N ət	24-MW-28A	24-MW-29A	24-MW-30A
Sample ID Collection Date					V24MW28A 14-Mar-06	V24MW29A 14-Mar-06	V24MW30A 13-Mar-06
Analyte	MDL	PQL ^a	MDL ^a PQL ^a Primary MCL				
1,1,1-TCA	0.19	1.0	200		0.2 U g	0.2 U g	0.2 U g
1,1,2-TCA	0.28	1.0	5		0.2 U g	0.2 U g	ח
1,1,2-Trichlorotrifluoroethane	0.2	1.0	1,200		0.2 U g	0.2 U g	0.2 U g
1,1-DCA	0.18	1.0	S		0.2 U g	0.2 U g	n
1,1-DCE	0.32	1.0	9		0.2 U g	0.2 U g	n
1,2-DCB	0.13	0.5	009		0.2 U g	0.2 U g	0.2 U g
1,2-DCA	90.0	1.0	0.5		0.2 U g	0.2 U g	ר
1,2-DCP	0.25	0.5	2		0.2 U g	0.2 U g	0.2 U g
1,4-DCB	0.11	1.0	2		0.2 U g	0.2 U g	0.2 U g
2-Butanone	1.0	10	N/A		s 0 g	5 U g	5 U g
Acetone	0.78	10	N/A		n	ח	n
Benzene	0.02	0.4	-		0.2 U g	0.2 U g	0.2 U g
Bromodichloromethane	0.12	0.5	100 ^b		0.2 U g	0.2 U g	0.2 U g
Carbon disulfide	0.48	1.0	N/A		0.2 U g	0.2 U g	0.2 U g
Chlorobenzene	0.12	0.5	92		0.2 U g	0.2 U g	0.2 U g
Chloroform	0.12	0.3	100		0.2 U g	0.2 U g	0.2 U g
Chloromethane	0.32	1.0	N/A		0.2 U g	0.2 U g	0.2 U g
cis-1,2-DCE	0.21	1.0	9		0.2 U g	0.2 U g	0.2 U g
Dibromochloromethane	0.25	0.5	100 _p		0.2 U g	0.2 U g	0.2 U g
DIPE	0.16	5.0	N/A		0.2 U g	0.2 U g	0.2 U g
Ethylbenzene	0.12	1.0	300		0.2 U g	0.2 U g	0.2 U g
m,p -Xylenes	0.25	2.0	1,750°		0.5 U g	0.5 U g	0.5 U g
MTBE	0.3	1.0	13		0.2 U g	0.2 U g	0.2 U g
o -Xylene	0.13	1.0	1,750°			0.2 U g	0.2 U g
Styrene	0.13	1.0	100		0.2 U g	0.2 U g	0.2 U g
PCE	0.15	1.0	S		26 g	19 g	1.4 g
Toluene	0.11	1.0	150			0.2 U g	0.2 U g
trans -1,2-DCE	0.27	1.0	10		0.2 U g	0.2 U g	0.2 U g
TCE	0.18	1.0	5			0.2 U g	0.2 U g
TCFM	0.22	1.0	150		0.5 U g	0.5 U g	0.5 U g
Vinyl chloride	0.36	1.0	0.5		0.2 U g	0.2 U g	0.2 U g
All other target analytes	N/A	N/A	N/A		UN	QN.	UN

Table 5
VOCs in Groundwater
Winter 2006
EPA Method SW8260B (µg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

		đu							
Sample Location Sample ID Collection Date		eZ gaad	Vells 24-MW-3B V24MW3B 07-Mar-06	24-MW-3B V99W631 (D) 07-Mar-06	24-MW-4B V24MW4BM 10-Mor-06	24-MW-5B V24MW5B	24-MW-8B V24MW8B	24-MW-9B V24MW9B	24-MW-10B V24MW10B
Analyte	MDL ^a PQL ^a Primary	Primary MCL		00 1071	10-1011	00-19301-00	00-Mar-00	0 /-!viar-00	U0-1VIar-U0
1,1,1-TCA	0.19 1.0	200	0.2 U g	0.2 U g	0.2 U g	в 99	0.2 U 9	0.2 11 9	Ξ
1,1,2-TCA	0.28 1.0	5	0.2 U g	0.2 U g	0.2 U g	6.2	0.45 J q	0.2 U g)
1,1,2-Trichlorotrifluoroethane		1,200	0.2 U g	0.2 U g	0.2 U g	0.38 J g	0.48 J q	0.2 U g	ņ
1,1-DCA		5	0.2 U g	0.2 U g	0.2 U g	92 g	0.85 J q		D
1,1-DCE	0.32 1.0	9	0.2 U g		0.2 U g	520 g	0.52 J q	0.2 U g	0.2 U g
1,2-DCB		009	0.28 J q	0.27 J q	0.2 U g	0.2 U g	0.2 U g		D
1,2-DCA	0.06 1.0	0.5	0.2 U g	0.2 U g	0.2 U g		0.2 U g		Ω
1,2-DCF 1 4. DCB	_	n 4	0.2 U g	0.2 U g	0.2 U g);	0.2 U g	0.2 U g	n
1,4-DCD		ر م مرابع	0.2 U g	0.2 U g	> :	0.2 U g	0.2 U g	0.2 U g	\supset
Acetone		N/A	50 C 5) ;	88 0 5	5 U 8	5 U g	S U g
Accione		N/A	3 C G	ы Э :	80 C C	s ⊃	5 U g	S U g	כ
Doubene		1	8 O 7:0)		\supset	0.2 U g	0.2 U g
Bromodichloromethane		100,	0.2 U g	0.2 U g	n	0.2 U g	Ω	0.2 U g	n
Carbon disultide	0.48 1.0	N/A	0.2 U g	<u></u>	0.2 U g	D	0.2 U g	Þ	0.2 U g
Chlorobenzene		0,	0.2 U g	0.2 U g	D	D	n	D	
Chloroform	0.12 0.3	100°	0.2 U g	0.2 U g	0.2 U g	20 g	2.5 g	D	0.2 U g
Chloromethane		N/A)	Þ	0.2 U g	<u>-</u>	0.2 U g	0.2 U g	0.2 U g
cts -1,2-DCE		9	0.2 U g	0.2 U g	Þ	18 g	64 g	D	
Dibromochloromethane		100	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
DIFE		N/A	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Eunyloenzene		300	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	D
m,p -Xylenes		1,750	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g
MIBE		13	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
o-Xylene		1,750°	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Styrene		000	0.2 U g	0.2 U g	0.2 U g	Þ	0.2 U g	0.2 U g	0.2 U g
PCE H-1		5	> ;	0.2 U g	0.2 U g		41 g	0.73 J q	91 g
Loluene		150	⊃ ;	0.2 U g	0.2 U g	\supset	0.2 U g	0.2 U g	0.2 U g
rans -1,2-DCE		O ,	\supset	0.2 U g	0.2 U g		0.2 U g	0.2 U g	0.2 U g
TCE		د.	-	;) 				1.2 g
I CFIM Vinyl obloride	0.22 1.0) 20 20				7.2 g	;		
All other target analytes	N/A N/A	0.5 N/A	8 O 7:0 ND	8 0 7:0 ND	0.2 U g ND	S	0.2 U g	0.2 U g	0.2 U g

Table 5
VOCs in Groundwater
Winter 2006
EPA Method SW8260B (µg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

Sample Location Sample ID Collection Date			Deep Zone Wells	24-MW-10B V99W627 (D) 06-Mar-06	24-MW-11B V24MW11B 09-Mar-06	24-MW-12B V24MW12B 03-Mar-06	24-MW-13B V24MW13B 07-Mar-06	24-MW-14B V24MW14B 10-Mar-06	24-MW-14B V99W633 (D) 10-Mar-06	24-MW-15B V24MW15B 10-Mar-06
Analyte	MDL ^a PC	MDL ^a PQL ^a Primary	ury L			i				
1,1,1-TCA	0.19	.0 200		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	D
1,1,2-TCA				0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.51 J q	0.54 J g	0.2 U g
1,1,2-Trichlorotrifluoroethane			0	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	'n
1,1-DCA				D	0.2 U g	0.2 U g	0.2 U g	D	0.2 U g	Ω
1,1-DCE				D	0.2 U g	0.2 U g	0.2 U g	n		n
1,2-DCB		0.5 600		0.2 U g	0.43 J q	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,2-DCA				0.2 U g	0.2 U g	ֹם	ח	n		n
1,2-DCP				0.2 U g	0.2 U g	0.2 U g	0.2 U g	\supset		Ω
1,4-DCB				0.2 U g	0.2 U g	0.2 U g	> ;	0.2 U g	0.2 U g	> ;
2-Butanone	1.0) 	5 U g	D :	<u></u>			5 U g
Acetone				р;	5 U g	5 U g	5 U g	5 U g	5 U g	
Benzene				0.2 U g	0.2 U g	\supset	D	ב		\Box
Bromodichloromethane	0.12 0.			0.2 U g	0.2 U g	D	0.2 U g	0.2 U g		0.2 U g
Carbon disulfide				0.2 U g	0.2 U g		0.2 U g	0.2 U g	0.2 U g	D
Chlorobenzene		0.5 70		0.2 U g	0.2 U g	0.2 U g	D	n	D	0.2 U g
Chloroform				0.2 U g	0.2 U g	D	0.2 U g	2.4 g	2.4 g	
Chloromethane				0.2 U g	0.2 U g		0.2 U g	0.2 U g	0.2 U g	0.2 U g
cis-1,2-DCE		1.0 6		0.2 U g	D	Þ	r			n
Dibromochloromethane		$0.5 100^{b}$		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
DIPE				0.2 U g	0.2 U g	Þ	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Ethylbenzene		1.0 300		0.2 U g	0.2 U g	0.2 U g	0.2 U g	D	0.2 U g	n
m,p -Xylenes		$2.0 1,750^{\circ}$	ار	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g
MTBE		1.0 13		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
o -Xylene		_	٥(0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Styrene				0.2 U g	0.2 U g		0.2 U g	0.2 U g	0.2 U g	0.2 U g
PCE				93 g	0.81 J q	0.2 U g	g 099	17 g	17 g	0.2 U g
Toluene					0.2 U g		0.2 U g	0.2 U g	ב	0.2 U g
trans -1,2-DCE				0.2 U g	0.2 U g		0.2 U g	b	0.2 U g	0.2 U g
TCE				1.2 g	0.45 J q		7.4 g	1,100 g	1,000 g	0.2 U g
TCFM	0.22 1.	1.0 150					0.5 U g			0.5 U g
Vinyl chloride		·				0.2 U g			0.2 U g	
All other target analytes	N/A N/A	A/N A/A		ND	QN	QN	QN	QN	QN	QN ND

Table 5
VOCs in Groundwater
Winter 2006
EPA Method SW8260B (µg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

			эш							
Sample Location			oZ q	24-MW-16B	24-MW-17B	24-MW-19B	24-MW-19B	24-MW-20B	24-MW-21B	24-MW-22B
Sample ID Collection Date			ləəQ V	V24MW16B 09-Mar-06	V24MW17B 10-Mar-06	V24MW19B 10-Mar-06	V99W634 (D) 10-Mar-06	V24MW20B 09-Mar-06	V24MW21B 09-Mar-06	V24MW22B 07-Mar-06
Analyte	MDL ^a PQL ^a Primary	a Primary MCL								
1,1,1-TCA	0.19 1.0	200		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,1,2-TCA	0.28 1.0	5		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	n
1,1,2-Trichlorotrifluoroethane	0.2 1.0	1,200		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	ר
1,1-DCA		5		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	ח	0.2 U g
1,1-DCE	0.32 1.0	9		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,2-DCB		009		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	Ω	Ω
1,2-DCA		0.5		0.2 U g	n	ֹם	Þ	0.2 U g	0.2 U g	n
1,2-DCP	_	5		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	Þ	n
1,4-DCB		S		0.2 U g	Þ	D	0.2 U g	0.2 U g	0.2 U g	0.2 U g
2-Butanone		N/A		5 U g	5 U g	5 U g	5 U g	5 U g	n	5 U g
Acetone		N/A		⊃	5 U g	D	5 U g	5 U g		n
Benzene	0.07 0.4			0.2 U g	ח	D	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Bromodichloromethane	0.12 0.5	100 ^b		0.2 U g	0.2 U g	0.2 U g	n	ח	D	_
Carbon disulfide		N/A		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.28 J q	_	0.63 J q
Chlorobenzene	0.12 0.5	70		0.2 U g	ח	n	ר	0.2 U g	0.2 U g	0.2 U g
Chloroform	0.12 0.3	100 ^b		0.2 U g	0.33 g	0.2 U g	0.2 U g	Þ	Ω	D
Chloromethane		N/A		0.2 U g	0.2 U g	0.2 U g	0.2 U g		0.2 U g	n
cis-1,2-DCE	0.21 1.0	9		0.2 U g	1.2 g	8.8	8.9 g	1.1 g	12 g	8.4
Dibromochloromethane	0.25 0.5	100 _p		0.2 U g	0.2 U g	0.2 U g	0.2 U g		D	Ω
DIPE		N/A		0.2 U g	0.2 U g	0.2 U g	0.2 U g	ר	0.2 U g	0.2 U g
Ethylbenzene	0.12 1.0	300		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
m,p-Xylenes		$1,750^{c}$		0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g
MTBE	0.3 1.0	13		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
o -Xylene	0.13 1.0	$1,750^{\circ}$		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Styrene	0.13 1.0	100		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
PCE		Ś		13 g	5 g	0.91 J q	0.85 J q	13 g	0.2 U g	4.5 g
Toluene		150		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	D
trans -1,2-DCE	0.27 1.0	9		0.2 U g	0.2 U g	0.55 J q	0.58 J q	0.2 U g	p f 9.0	0.2 U g
TCE		S				4.1 g	4.1 g	6.3 g	5.6 g	4 8
TCFM		150			0.5 U g			0.5 U g	0.5 U g	0.5 U g
Vinyl chloride	0.36 1.0	0.5		0.2 U g						
All other target analytes		N/A		O.	ON	QN	ON	QN	ND	QN

Table 5
VOCs in Groundwater
Winter 2006
EPA Method SW8260B (μg/L)
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

Sample Location Sample ID Collection Date				Deep Zone Wells	24-MW-23B V24MW23B 10-Mar-06	24-MW-24B V24MW24B 10-Mar-06	24-MW-25B V24MW25B 10-Mar-06	24-MW-26B V24MW26B 13-Mar-06	24-MW-27B 24MW27B 14-Mar-06	24-MW-27B V99W636 (D) 14-Mar-06
Analyte	MDL ^a	MDL ^a PQL ^a Primary MCL	Primary MCL							
1,1,1-TCA	0.19	1.0	200		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,1,2-TCA	0.28	1.0	5		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,1,2-Trichlorotrifluoroethane	0.2	1.0	1,200		0.73 J q	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,1-DCA	0.18	1.0	5		0.43 J q	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
1,1-DCE	0.32	1.0	9		0.3 J q	0.2 U g	0.2 U g	0.2 U g	0.2 U g	n
1,2-DCB	0.13	0.5	009		0.2 U g	0.2 U g	0.2 U g	n	0.2 U g	C
1,2-DCA	90.0	1.0	0.5		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	Ú
1,2-DCP	0.25	0.5	v,		0.2 U g	0.2 U g	0.2 U g	0.2 U g	> ;	0.2 U g
1,4-DCB	0.II ,	1.0	?		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
2-Butanone	1.0	01	Υ V V)	> :)	5 D 8	5 U g	5 U g
Acetone	0.78	0 ;	Υ V V		> ;)	s 0 s);	5 U g	5 U g
Benzene	0.07	9.4	_		0.2 U g	0.2 U g)		n
Bromodichloromethane	0.12	0.5	100b		0.2 U g	0.2 U g	⊃	D	n	n
Carbon disulfide	0.48	1.0	N/A		0.2 U g	n	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Chlorobenzene	0.12	0.5	70		0.2 U g	0.2 U g	0.2 U g	n	0.2 U g	0.2 U g
Chloroform	0.12	0.3	100 _b		1.5 g	0.2 U g	0.2 U g	0.2 U g	Ω	n
Chloromethane	0.32	1.0	N/A		D	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
cis-1,2-DCE	0.21	1.0	9		1.4 g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Dibromochloromethane	0.25	0.5	100 ^b		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	n
DIPE	0.16	5.0	N/A		0.2 U g	0.2 U g	0.2 U g	0.2 U g	n	0.2 U g
Ethylbenzene	0.12	1.0	300		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
m,p-Xylenes	0.25	2.0	1,750°		0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g	0.5 U g
MTBE	0.3	1.0	13		0.2 U g	0.2 U g	0.2 U g	0.2 U·g	0.2 U g	0.2 U g
o -Xylene	0.13	1.0	1,750°		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
Styrene	0.13	1.0	100		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
PCE	0.15	1.0	5		14 g	0.2 U g	0.2 U g	72 g	33 g	
Toluene	0.11	1.0	150		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
trans -1,2-DCE	0.27	1.0	10		0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g	0.2 U g
TCE	0.18	1.0	5		170 g	0.2 U g	0.2 U g	J	0.37 J q	0.34 J q
TCFM	0.22	1.0	150		i		0.5 U g	0.5 U g		
Vinyl chloride	0.36	1.0	0.5		0.2 U g	0.2 U g	0.2 U g	> £	0.2 U g	0.2 U g
An other target analytes	Y/N	N/A	Y/Y		QVI	UN	UN	QN.	UN	UN

IRP Site 24 (Entomology Wash Rack) EPA Method SW8260B (µg/L) Vandenberg AFB, California VOCs in Groundwater Winter 2006

Data Validity Qualifier(s):

- The analyte was positively identified and the result is usable; however, the analyte concentration is an estimated value.
- The analyte was not detected at or above the MDL.

Data Validity Comment(s):

- The surrogate spike recovery was outside quality control criteria.
- The duplicate/replicate sample's relative percent difference was outside the control limit.
- The data met prescribed criteria as detailed in the QAPP.
- The analyte detection was below the PQL.
- The result is above the instrument's calibration range.

Definition(s):

- duplicate sample
- dichloroethane
- DCA DCB DCE
- dichlorobenzene
 - dichloroethene
- dichloropropane DCP DIPE MCL MDL
- diisopropyl ether
- maximum contaminant level method detection limit
 - methyl-tert-butyl ether MTBE
 - micrograms per liter μg/L
- not applicable
- tetrachloroethene
- Quality Assurance Project Plan practical quantitation limit QAPP

 - trichloroethane
- trichlorofluoromethane - trichloroethene

Note(s):

Bold type indicates results that were above the MCL.

- Values from QAPP Addendum (Tetra Tech 2004).
- For total trihalomethanes (sum of bromoform, bromodichloromethane, chloroform, and dibromochloromethane).
 MCL of 1,750 μg/L applies to sum of m-xylene, o-xylene, and p-xylene.

1,4-Dioxane and SVOCs in Groundwater Winter 2006

EPA Methods Modified SW8270C SIM and SW8270C (μg/L) IRP Site 24 (Entomology Wash Rack)

Vandenberg AFB, California

Location	Sample ID	Date		1,4-Dioxane	Benzoic acid	4-Methylphenol	Naphthalene	Phenol	Target
			MDL ¹	0.5	21	1.8	1.6	2.4	N/A
			POL^{1}	3.0	100	50	10	10	N/A
Shallow Zone Wells	Wells								
24-PMW-1	V24PMW1			NA	9.5 U g	4.8 U g	4.8 U g	4.8 U g	QN ON
24-PMW-1	V99W630 (D)			NA	9.8 U g	4.9 U g	n	D	QN
24-PMW-2	V24PMW2			NA	10 U g	5 U g	Г	\supset	QN
24-PMW-3	V24PMW3			NA	9.7 U g	4.9 U g	4.9 U g	4.9 U g	QN ON
24-PMW-4	V24PMW4			280 R b	D	n	Ω	\supset	ΩN
24-PMW-5	V24PMW5			59 g	9.6 U g	4.8 U g	Ω	n	QN
24-PMW-8	V24PMW8			NA	1,800 J q	_	250 U g		N
Intermediate Zone Well	Zone Well						-	_	
24-MW-5A	V24MW5A			110 g	9.6 U g	4.8 U g	4.8 U g	4.8 U g	N QN
Deep Zone Well	IIa								
29-MW-5B	V29MW5B			980 l p	NA	NA	NA	NA	NA
Date V. 1: 4:4. O 1:6: . (.)	O Beauty								

Data Validity Qualifier(s):

- The analyte was positively identified and the result is usable; however, the analyte concentration is an estimated value.
 - The sample result is rejected and not usable for any purpose. The presence or absence of the analyte cannot be verified.
 - The analyte was not detected at or above the MDL.

Data Validity Comment(s):

- The surrogate spike recovery was outside quality control criteria.
 - The data met prescribed criteria as detailed in the QAPP.
 - The analyte detection was below the PQL.

Definition(s):

- duplicate sample (D) MDL
- method detection limit
- Not detected; result is less than the MDL.
- hg/L micrograms per liter
 N/A not applicable
 NA not analyzed
 ND Not detected; result is less than the
 PQL practical quantitation limit
 QAPP Quality Assurance Project Plan
 SVOC semivolatile organic compound

The California Department of Health Services notification level for 1,4-dioxane is 3 µg/L.

- Values from QAPP Addendum (Tetra Tech 2004).

Table 7 OCPs and OPPs in Groundwater

Winter 2006

EPA Methods SW8081B and SW8141A (μg/L) IRP Site 24 (Entomology Wash Rack) Vandenberg AFB, California

Sample Location Sample ID Collection Date				24-PMW-1 V24PMW1 07-Mar-06	24-PMW-1 V99W630 (D) 07-Mar-06	24-PMW-2 V24PMW2 06-Mar-06	24-PMW-3 V24PMW3 07-Mar-06
Analyte	MDL ¹	PQL ¹	Primary MCL				
OCPs							
Aldrin	0.002	0.1	N/A	0.019 U g	0.071 J q	0.021 U g	0.026 J q
alpha-BHC	0.002	0.1	N/A	0.019 U g	0.092 J q	0.021 U g	0.02 U g
beta-BHC	0.005	0.1	N/A	0.11 J f	0.18 J f	0.021 U g	0.02 U g
Heptachlor epoxide	0.004	0.1	0.01	0.019 U g	0.092 J q	0.021 U g	0.02 U g
gamma-BHC (Lindane)	0.002	0.1	0.2	0.03 J q	0.31 g	0.021 U g	0.02 U g
All other target analytes	N/A	N/A	N/A	ND '	ND	ND	ND
OPPs							
All target analytes	N/A	N/A	N/A	ND	ND	ND	ND

Data Validity Qualifier(s):

- J The analyte was positively identified and the result is usable; however, the analyte concentration is an estimated value.
- U The analyte was not detected at or above the MDL.

Data Validity Comment(s):

q

- The duplicate/replicate sample's relative percent difference was outside the control limit.
- g The data met prescribed criteria as detailed in the QAPP.
 - The analyte detection was below the PQL.

Definition(s):

BHC - benzene hexachloride
MDL - method detection limit

µg/L - micrograms per liter

N/A - not applicable

ND - Not detected; result is less than the MDL.

OCP - organochlorine pesticide
OPP - organophosphorous pesticide
PQL - practical quantitation limit
QAPP - Quality Assurance Project Plan

Note(s):

Bold type indicates results that were above the MCL.

- Values from QAPP Addendum (Tetra Tech 2004).

Table 8
Summary of Key Contaminants of Concern
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

						PCE a	(μg/L)						
Sample Location	May-01	Dec-02	Oct-03	Nov-03/ Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
Shallow Zone Wells													
24-PMW-1	102	96.4	NA	103	NA	NA	NA	32	55	54	38	34	59 [*]
24-PMW-2	0.811	2.6	NA	1.8	NA	NA	NA	0.5	0.78	1.1	0.76	2.2	1.1
24-PMW-3 24-PMW-4	751	361	NA	380	NA	NA	NA	490	770	380	140	340	620
24-PMW-5	19.3 18.7	25.2 91.1	NA NA	31.1 27.3	NA NA	NA NA	NA	24	50	39	24	36	22
24-PMW-8	i					NA	NA	20	18	19	19	20	24
24-PMW-8-2	NA NA	41.6 NA	30.8 33.4	67.7 42.3	38.2 30.7	33.4 28.6	25.9	4.7	3	4.2	0.27	ND	ND
24-PIW-8-1	NA NA	NA NA	33.4 NA	42.3 NA	NA	28.6 NA	27.4 NA	7 29	7.2 1.7	27 10	17	16	ND
24-PIW-8-2	NA	NA	44	12.9	2.6	13.6	3.3	65	20	18	12 12	1.7 1.8	ND 0.79
24-PMW-9	NA	ND	NA	DRY	NA	NA	NA	DRY	DRY	10	6.9	1.0	7.6
24-PMW-10	NA	0.52	NA	10.8	NA	NA	NA	7.6	3.6	4.4	3.4	21	22
24-PMW-11	NA	1.3	NA	1.3	NA	NA	NA	1	1.6	1.8	0.85	1.4*	1.6
24-PMW-13	NA	1.1	NA	0.74	NA	NA	NA	DRY	1.2	2.5	0.26	2.7	2
24-PMW-18	NA	108,000	NA	185,000	NA	NA	NA	24,000	78,000	92,000	61,000	83,000	47,000
24-PMW-19	NA	ND	NA	ND	NA	NA	NA.	•	•	•			
24-PMW-21								ND	ND	ND	ND	ND*	ND
	NA	NA	NA	38.1	NA	NA	NA	34	36	38	41	36	49
24-PMW-22 24-PMW-26	NA	NA	NA	8,940	NA	NA	NA	660	15,000	17,000	20,000	23,000	28,000
Intermediate Zone Wells	NA	NA	NA	ND	NA	NA	NA	ND	3.9	0.67	0.21	0.94	4.4
24-MW-2	10.3	8.1	NA	14.5	NA	NA	NA	19	27	15	12	12*	13
24-MW-3A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-4A	NA	NA	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-5A	3.67	37.7	NA	5.1	NA	NA	NA	17	4.1	3.6	5.8	4.8	4.2
24-MW-6	NA	NA	NA	0.3	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-7	ND	ND	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-8A	NA	6.9	NA	10.2	NA	NA	NA	18	14	14	12	11	27
24-MW-8A-2	NA	NA	27.3	47.3	37.9	34.1	29.5	47	52	38	40	27	25
24-MW-9A	NA	1.4	NA	0.48	NA	NA	NA	4.7	1.4	1.4	1.1	4.9	3.5*
24-MW-10A	NA	0.42	NA	0.32	NA	NA	NA	1.6	0.48	1.3	0.85	3.5	1.7
24-MW-11A	NA	ND	NA	ND	NA	NA	NA	1.6	62	3.1	0.55	10	1.9
24-MW-12A	NA	ND	NA	ND	NA	NA	NA	ND	6.8	0.82	ND	ND*	ND
24-MW-13A	NA	60.1	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-14A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-15A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	15
24-MW-22A	NA	NA	NA	32.1	NA	NA	NA	24	33	39	36	47	48*
24-MW-26A	NA	NA	NA	1,990	NA	NA	NA	2,500	3,300	3,000	3,500	1,600	2,900
24-MW-28A	NA	NA	NA	27.6	NA	NA	NA	48	31	46	39	30	26
24-MW-29A	NA	NA	NA	37.6	NA	NA	NA	4.5	38	37	32	21	19
24-MW-30A	NA	NA	NA	0.49	NA	NA	NA	ND	ND	0.86	ND	0.64	1.4
Deep Zone Wells 24-MW-3B	NID	ND	27.4	3.75									
24-MW-4B	ND NA	ND ND	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND	ND ND*	ND*
24-MW-5B	8.22	59.1	NA NA	18.3	NA NA						ND		ND
24-MW-8B						NA	NA	NA	19	18	16	12	25
	NA	25.9	NA	42.4	NA	NA	NA	33	51	44	40	43	41
24-MW-9B	NA	ND	NA	0.32	NA	NA	NA	0.6	0.27	0.33	0.21	0.78	0.73*
24-MW-10B	NA	45.0	NA	76.1	NA	NA	NA	52	100	80	82	93*	93
24-MW-11B	NA	0.32	NA	0.31	NA	NA	NA	0.29	0.81	0.35	ND	0.83	0.81
24-MW-12B	NA	ND	NA	ND	NA	NA	NA	ND	0.42	ND	ND	ND*	ND
24-MW-13B	NA	98.1	NA	306	NA	NA	NA	370	470	460	620	590	660
24-MW-14B	NA	8.3	NA	13	NA	NA	NA	14	24	14	18	22*	17
24-MW-15B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-16B	NA	1.1	NA	ND	NA	NA	NA	ND	ND	ND	ND	68	13
24-MW-17B	NA	1.4	NA	2.8	NA	NA	NA	4	5.4	5.5	4.4	4.7*	5
24-MW-19B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	0.91
24-MW-20B	NA	NA	NA.	16.7	NA.								
24-MW-21B	ŅA NA	NA NA	NA NA	1.3	NA NA	NA NA	NA NA	34 0.55	50 2.4	69 ND	100	20 ND	13 ND
24-MW-22B	NA NA	NA NA	NA NA	7.7	NA NA	NA NA	NA NA	0.55 30	2.4 8.7	ND	1.9	ND	ND
24-MW-23B									8.7	4.4	5.6	5.2	4.5
24-MW-24B	NA NA	NA NA	NA NA	2.5	NA NA	NA	NA	ND	ND	7.2	9.4	12*	14
	NA	NA	NA	ND	NA	NA	NA	ND	2.4	0.52	0.22	ND.	ND
24-MW-25B	NA	ND	NA	ND	NA	NA	NA	ND	ND	0.44	0.54	ND*	ND
24-MW-26B	NA NA	NA	NA	8.8	NA ·	NA	NA	33	58	65	65	45	72
24-MW-27B	NA NA	NA NA	NA NA	72.2	NA	NA	NA	3.1	86	83	66	43	33
24-MW-31B	NA	NA	NA	ND	NA_	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY

Table 8 Summary of Key Contaminants of Concern IRP Site 24 (Entomology Wash Rack) Vandenberg AFB, California

						TCE b	(µg/L)						·····
Sample Legation	May-01	Dog 02	Oat 02	Nov-03/	Ion 04			E-11.04	W. 05	C 05	C 07	E 11 0#	1111 Oc
Sample Location Shallow Zone Wells	May-01	Dec-02	Oct-03	Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
24-PMW-1	10.6	16.8	NA	8.1	NA	NA	NA	6.8	9.5	15	7.3	8.2	9.9*
24-PMW-2	355	230	NA	248	NA	NA	NA NA	190	300	290	220	220	250
24-PMW-3	16.2	24.4	NA	28.3	NA	NA	NA	26	72	41	17	44	55
24-PMW-4	164	147	NA	167	NA	NA	NA	120	62	79	80	110	160
24-PMW-5	84.3	84.4	NA	50	NA	NA	NA	52	45	54	33	130	120
24-PMW-8	NA	758	399	595	417	759	342	4.4	15	53	4.8	1.8	18
24-PMW-8-2	NA	NA	393	358	287	586	293	3	55	540	420	190	11
24-PIW-8-1	NA NA	NA	NA 240	NA	NA	NA	NA	150	18	110	180	30	11
24-PIW-8-2 24-PMW-9	NA NA	NA ND	348 NA	330 DRY	57.3 NA	281 NA	107 NA	260 DRY	320 DRY	300	380	61	25
24-PMW-10	NA NA	0.49	NA NA	3.8	NA NA	NA NA	NA NA	2	1.8	2.6 0.82	2 2	1.4 1	2.1 2.8
24-PMW-11	NA	1.0	NA	0.53	NA	NA	NA	0.57	0.25	0.33	0.46	0.24*	0.23
24-PMW-13	NA	0.51	NA	ND	NA	NA	NA NA	DRY	0.23	0.53	ND	0.24	0.23
24-PMW-18	NA	61.2	NA	72.8	NA	NA	NA	76	62	72	82	ND ^k	67
24-PMW-19	NA NA	ND	NA.	ND	NA								
						NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-21	NA	NA	NA	1.1	NA	NA	NA	1	1.5	1.3	1.2	1.2	2.1
24-PMW-22	NA NA	NA	NA	23.8	NA	NA	NA	5.6	65	ND	42	49	69
24-PMW-26 Intermediate Zone Wells	NA	NA	NA	ND	NA	NA	NA	ND	0.52	ND	ND	ND	0.22
24-MW-2	45.7	50.7	NA	125	NIA	. 374	NT A	450	210	446		*	
24-MW-3A	45.7 NA	50.7 ND	NA NA	125 ND	NA NA	NA NA	NA NA	150 ND	210	130	97 ND	61*	67 ND
24-MW-4A	NA NA	NA	NA NA	DRY	NA NA	NA NA	NA NA	DRY	6.5 DRY	ND DRY	ND DRY	ND DRY	ND DRY
24-MW-5A	164	127	NA	89.6	NA	NA	NA	29	95	190	140		
24-MW-6	NA	NA	NA NA	ND	NA NA	NA NA	NA NA	DRY	DRY	DRY	DRY	120 DRY	180 DRY
24-MW-7	4.0	11.6	NA	9.9	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-8A	NA	271	NA	381	NA	NA	NA	270	410	430	440	300	280
24-MW-8A-2	NA	NA	397	452	365	688	349	900	960	610	930	500	280
24-MW-9A	NA	8.3	NA	4.7	NA	NA	NA	9.3	13	13	12	13	16*
24-MW-10A	NA	ND	NA	ND	NA	NA	NA	0.24	0.81	ND	4	ND	ND
24-MW-11A	NA	ND	NA	0.71	NA	NA	NA	0.98	20	1.1	0.69	0.73	0.8
24-MW-12A	NA	ND	NA	ND	NA	NA	NA	ND	0.25	ND	0.26	ND*	ND
24-MW-13A	NA	1.3	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-14A	NA	ND	NA	ND	NA	NA	NA	1.4	0.63	2.4	0.38	0.24	ND
24-MW-15A	NA	2.0	NA	ND	NA	NA	NA	ND	ND	1.1	0.26	ND	9.5
24-MW-22A	NA	NA	NA	ND	NA	NA	NA	0.64	0.35	0.27	0.23	0.27	0.3*
24-MW-26A	NA	NA	NA	17.9	NA	NA	NA	17	28	20	23	11	16
24-MW-28A 24-MW-29A	NA NA	NA	NA	ND	NA	NA	NA	0.29	0.26	0.53	0.4	0.23	0.43
24-MW-30A	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
Deep Zone Wells	1111	117.	1471	IND.	IVA	IVA	INA	ND	ND	IND	ND	ND	ND
24-MW-3B	2.23	0.97	NA	1.6	NA	NA	NA	0.3	8.8	3.6	1.9	1.8	1.6*
24-MW-4B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND		ND*	
24-MW-5B	20.2										ND		ND
		32.8	NA	35.9	NA	NA	NA	NA	39	38	31	28	42
24-MW-8B	NA	522	NA	773	NA	NA	NA	620	730	690	660	640	560
24-MW-9B	NA	2.2	NA	8.4	NA	NA	NA	2.2	1.9	4.4	3.2	3.6	10*
24-MW-10B	NA NA	0.50	NA	0.53	NA	NA	NA	0.64	0.73	0.96	1.3	1.1*	1.2
24-MW-11B	NA	0.36	NA	ND	NA	NA	NA	0.37	0.72	0.45	0.34	0.34	0.45
24-MW-12B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-13B	NA	10.9	NA	4.7	NA	NA	NA	8.2	6.6	6	5.1	6.1	7.4
24-MW-14B	NA	672	NA	908	NA	NA	NA	690	1,400	910	1,000	1,000*	1,100
24-MW-15B	NA	ND	NA	ND	NA	NA	NA	ND	1.2	ND	0.59	ND*	ND
24-MW-16B	NA	1.3	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	0.21
24-MW-17B	NA	82.1	NA	131	NA	NA	NA	130	180	130	110	110*	110
24-MW-19B	NA	NA	NA	3.2	NA	NA	NA	2.5	4.2	4.1	2.9	33*	4.1
24-MW-20B	NA	NA	NA	0.98	NA	NA	NA.	2.2	4.4	3.3	4.6	4.5	6.3
24-MW-21B	NA.	NA	NA	11.1	NA	NA.	NA NA	7.5	4.4	3.3 10	9.7	3	5.6
24-MW-22B	NA	NA	NA	2.6	NA	NA	NA	1.1	0.35	0.94	1.4	2.3	4
24-MW-23B	NA	NA	NA	86.4	NA	NA	NA	1.8	2.2	100	120	140*	170
24-MW-24B	NA	NA	NA	ND	NA	NA	NA.	ND	0.25	ND	ND	ND*	
24-MW-25B	NA NA	ND	NA NA										ND
24-MW-26B	NA NA	ND NA	NA NA	ND ND	NA NA	NA NA	NA NA	2.4 0.22	2 0.35	ND 0.42	7.4	ND*	ND 0,51
24-MW-27B	NA NA	NA NA	NA NA	0.78	NA NA	NA NA	NA NA	ND	1.3	0.42 1	0.41 1	0.32 0.48	0.31
24-MW-31B	NA	NA	NA	2.5	NA.	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY

Table 8
Summary of Key Contaminants of Concern
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

						cis -1,2-DC	F c (ng/L)						
~				Nov-03/									
Sample Location Shallow Zone Wells	May-01	Dec-02	Oct-03	Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
24-PMW-1	ND	ND	NA	4.0	NA	NA	NA	ND	5.4	5.5	ND	ND	4.6*
24-PMW-2	ND	ND	NA	ND	NA NA	NA NA	NA NA	ND ND	ND	3.3 ND	ND ND	ND ND	4.6 ND
24-PMW-3	14.4	37	NA	103	NA	NA	NA	12	37	28	18	18	20
24-PMW-4	2.44	3.1	NA	2.0	NA	NA	NA	1.2	0.84	1.2	0.96	1.4	2.1
24-PMW-5	2.37	2.3	NA	1.1	NA	NA	NA	1.1	1.5	1.6	1.8	2.2	2.8
24-PMW-8	NA	154	90.8	125	87.1	109	111	340	73	92	170	130	65
24-PMW-8-2 24-PIW-8-1	NA	NA	190	156	127	227	171	540	14	120	110	50	80
24-PIW-8-2	NA NA	NA NA	NA 56.4	NA 30.7	NA 6.2	NA 63.0	NA 13.7	24 43	1.7 43	9.4 34	16 34	10 11	1.3 ND
24-PMW-9	NA	ND	NA	DRY	NA	NA	NA	DRY	DRY	ND	ND	ND	ND ND
24-PMW-10	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-11	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-13	NA	ND	NA	ND	NA	NA	NA	DRY	ND	0.21	ND	ND	0.21
24-PMW-18	NA	18.7	NA	23.8	NA	NA	NA	74	35	31	94	ND^k	42
24-PMW-19	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-21	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-22	NA	NA	NA	4.0	NA	NA	NA	0.5	7.7	8.7	9.1	ND^k	9.6
24-PMW-26	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
Intermediate Zone Wells	0.102	3.75											
24-MW-2 24-MW-3A	0.193 NA	ND ND	NA NA	0.62 ND	NA NA	NA NA	NA NA	1.2 ND	1.8	0.53	0.49	0.26	0.27
24-MW-4A	NA NA	NA NA	NA NA	DRY	NA NA	NA NA	NA NA	ND DRY	0.3 DRY	ND DRY	ND DRY	ND DRY	ND DRY
24-MW-5A	2.67	1.2	NA	0.89	NA	NA	NA	9.5	1.3	2	1.7	1.6	2
24-MW-6	NA	NA	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-7	ND	ND	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-8A	NA	13.7	NA	18.1	NA	NA	NA	8.9	14	13	14	13	17
24-MW-8A-2	NA	NA	94.1	108	95.5	124	127	110	120	82	100	86	55
24-MW-9A	NA	0.30	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-11A	NA	ND	NA	ND	NA	NA	NA	ND	1.2	ND	ND	ND	ND
24-MW-12A 24-MW-13A	NA NA	ND ND	NA NA	ND DRY	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-14A	NA NA	ND ND	NA NA	ND	NA NA	NA NA	NA NA	DRY ND	DRY ND	DRY ND	DRY ND	DRY ND	DRY ND
24-MW-15A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	0.77
24-MW-22A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-26A	NA	NA	NA	13.2	NA	NA	NA	12	15	11	12	6.5	9.8
24-MW-28A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-29A 24-MW-30A	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
Deep Zone Wells	1421		1171	IND	1971	IVA	IVA	IND	ND	ND	ND	ND	ND
24-MW-3B	ND	ND	NA	ND	NA	NA	ΝA	ND	ND	ND	ND	ND	ND*
24-MW-4B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-5B	21.1	14.4	NA	12.7	NA	NA	NA	NA	13	12	14	21	18
24-MW-8B	NA	75.2	NA	62.4	NA	NA	NA	66	76	65	59	61	64
24-MW-9B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-11B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-12B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-13B	NA	2.5	NA	0.64	NA	NA	NA	0.82	0.25	0.31	0.24	0.31	0.33
24-MW-14B	NA	1.3	NA	2.5	NA	NA	NA	2.7	4	2.6	3.3	4.2*	3.2
24-MW-15B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-16B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-17B	NA	0.67	NA	1.4	NA	NA	NA	1.5	1.9	1.7	1.2	1.4*	1.2
24-MW-19B	NA	NA	NA	8.7	NA NA	NA	NA NA	6	9.4	8.6	7.1	1.4	1.2 8.9
24-MW-20B	NA NA	NA NA	NA NA	ND	NA NA	NA NA	NA NA	ND	9.4 ND	8.6 ND			
24-MW-21B	NA	NA NA	NA NA	1.1	NA NA	NA NA	NA NA	12	0.74	13	0.46 15	7.3 22	1.1 12
24-MW-22B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	2.1	2.7	8.4
24-MW-23B	NA	NA	NA	ND	NA	NA	NA	ND	ND	0.64	0.86	1.1*	1.4
24-MW-24B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-25B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-26B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-27B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-31B	NA	NA	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY

Table 8 Summary of Key Contaminants of Concern IRP Site 24 (Entomology Wash Rack) Vandenberg AFB, California

						Vinyl chlor	ide ^g (μg/L)			,.		····	
Sample Location	May-01	Dec-02	Oct-03	Nov-03/ Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
Shallow Zone Wells													
24-PMW-1 24-PMW-2	ND ND	ND ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	3.6*
24-PMW-3	ND ND	0.66	NA NA	ND 3.3	NA NA	NA NA	NA NA	ND 120	ND 22	ND	ND	ND	ND
24-PMW-4	ND	ND	NA NA	ND	NA NA	NA NA	NA NA	20	22 11	65 0.6	66 ND	24 ND	17 10
24-PMW-5	ND	ND	NA	ND	NA	NA	NA	ND	0.5	0.21	3.1	9.6	2.3
24-PMW-8	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
24-PMW-8-2	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24-PIW-8-1	NA	NA	NA	NA	NA	NA	NA	ND	0.56	0.2	ND	ND	ND
24-PIW-8-2	NA	NA	ND	ND	ND	ND	ND	ND	5.5	0.27	0.66	ND	ND
24-PMW-9 24-PMW-10	NA NA	ND ND	NA	DRY	NA	NA	NA	DRY	DRY	ND	ND	ND	ND
			NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-11 24-PMW-13	NA NA	ND ND	NA NA	ND ND	NA NA	NA NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-18	NA NA				NA	NA	NA	DRY	ND	ND	ND	ND	ND
		ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND.	ND
24-PMW-19	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-21	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-22	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	NĐ	ND
24-PMW-26 Intermediate Zone Wells	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-2	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-3A	NA	ND	NA	ND	NA	NA.	NA.	ND	ND ND	ND ND	ND ND	ND ND	ND ND
24-MW-4A	NA	NA	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-5A	ND	ND	NA	ND	NA	NA	NA	0.79	ND	ND	ND	ND	ND
24-MW-6	NA	NA	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-7	ND	ND	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-8A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-8A-2	NA	NA	ND	ND	ND	ND	ND	ND	0.21	ND	ND	ND	ND
24-MW-9A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-11A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-12A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-13A	NA	ND	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-14A 24-MW-15A	NA NA	ND ND	NA NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
				ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-22A 24-MW-26A	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND	ND	ND	ND	ND	ND*
24-MW-28A	NA	NA	NA	ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
24-MW-29A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND ND
24-MW-30A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
Deep Zone Wells													
24-MW-3B	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-4B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND^*	ND
24-MW-5B	ND	ND	NA	ND	NA	NA	NA	NA	0.42	0.29	0.8	3.6	2.8
24-MW-8B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-9B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-11B	NA	ND	NA	ND	NA	NA	NA NA	ND	ND ND	ND ND	ND ND	ND ND	ND ND
24-MW-12B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-13B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	
24-MW-14B	NA	ND	NA.	ND	NA NA	NA NA	NA NA	ND ND				ND*	ND
24-MW-15B	NA NA	ND	NA NA	ND ND	NA NA				ND	ND	ND		ND
24-MW-16B						NA NA	NA	ND	ND	ND	ND	ND*	ND
	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-17B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-19B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-20B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-21B	NA NA	NA NA	NA NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-22B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND.	ND
24-MW-23B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-24B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-25B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-26B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-27B	NA NA	NA NA	NA NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-31B	NA	NA	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY

Table 8
Summary of Key Contaminants of Concern
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

						1,1-DCE	d (ug/L)						
Sample Location	May-01	Dec-02	Oct-03	Nov-03/ Dec-03	Jan-04			E-11 04	N. 05	G 05	G 0.	*	
Shallow Zone Wells	Wiay-01	Dec-02	001-03	Dec-03	J 211-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
24-PMW-1	104	55.2	NA	66.7	NA	NA	NA	45	37	50	57	44	83*
24-PMW-2	1.49	1.3	NA	ND	NA	NA	NA	0.9	1.5	1	0.93	0.74	0.67
24-PMW-3	5.93	8.2	NA	5.2	NA	NA	NA	3.1	5.5	3.3	0.98	2.2	4.1
24-PMW-4	161	192	NA	385	NA	NA	NA	400	470	350	200	290	200
24-PMW-5	173	192	NA	278	NA	NA	NA	250	220	220	170	220	140
24-PMW-8 24-PMW-8-2	NA	0.72	ND	ND	ND	ND	ND	0.54	0.21	0.38	0.29	ND	ND
24-PIW-8-1	NA NA	NA NA	0.44 NA	ND NA	ND NA	ND NA	0.38 NA	1.1	ND	0.29	0.25	0.28	ND
24-PIW-8-2	NA NA	NA	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND 0.25	ND ND	ND ND
24-PMW-9	NA	ND	NA	DRY	NA	NA	NA	DRY	DRY	ND	ND	ND	ND ND
24-PMW-10	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-11	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-13	NA	ND	NA	ND	NA	NA	NA	DRY	ND	ND	ND	ND	ND
24-PMW-18	NA	2.9	NA	3.1	NA	NA	NA	1.6	1.8	ND	1.4	ND	0.77
24-PMW-19	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-21	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-22	NA	NA	NA	ND	NA	NA	NA	ND	0.85	0.67	0.73	ND	0.85
24-PMW-26	NA	NA	NA_	ND	NA	NA	NA	ND	ND	ND_	ND	ND	ND
Intermediate Zone Wells													
24-MW-2	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-3A 24-MW-4A	NA NA	ND NA	NA NA	ND	NA	NA.	NA	ND	ND	ND	ND	ND	ND
	l		NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-5A 24-MW-6	89.2 NA	81 NA	NA NA	55.7 1.0	NA NA	NA	NA	670	73	66	94	67	62
24-MW-7	0.63	2.0	NA NA	1.8	NA NA	NA NA	NA NA	DRY DRY	DRY DRY	DRY DRY	DRY DRY	DRY DRY	DRY
24-MW-8A	NA	1.6	NA	ND	NA	NA	NA	0.22	0.47	0.24	ND		DRY
24-MW-8A-2	NA	NA	ND	ND	ND	ND	ND	0.22	0.47	ND	0.2	ND ND	ND ND
24-MW-9A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-11A	NA	ND	NA	ND	NA	NA	NA	0.9	0.4	ND	ND	ND	ND
24-MW-12A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-13A	NA	ND	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-14A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-15A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-22A 24-MW-26A	NA NA	NA NA	NA NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-28A	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND	ND	ND
24-MW-29A	NA	NA	NA	ND	NA	NA	NA.	ND	ND	ND	ND ND	ND ND	ND ND
24-MW-30A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
Deep Zone Wells								-	-				
24-MW-3B	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-4B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND^*	ND
24-MW-5B	529	771	NA	820	NA	NA	NA	NA	880	580	590	540	520
24-MW-8B	NA	0.58	NA	0.76	NA	NA	NA	0.53	ND	0.57	0.6	0.66	0.52
24-MW-9B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-11B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-12B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-13B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-14B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-15B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-16B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND ND	ND ND
24-MW-17B	NA	ND	NA	ND	NA	NA	NA NA	ND	ND	ND	ND ND	ND*	
24-MW-19B	NA	NA	NA	ND	NA NA	NA NA	NA NA	ND				_	ND
24-MW-20B	NA NA	NA NA	NA NA	ND ND	NA NA				ND	ND	ND	ND*	ND
24-MW-21B	· NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND	ND
24-MW-22B	NA	NA	NA	ND	NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
24-MW-23B	NA	NA	NA	ND	NA	NA	NA	ND	ND	0.26	0.23	0.28*	0.3
24-MW-24B	NA	NA	NA	ND	NA.	NA.	NA.	ND ND	ND	ND		0.28 ND*	
24-MW-25B	NA	ND	NA	ND	NA NA	NA NA	NA NA				ND		ND
24-MW-26B	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	na Na	ND ND	ND ND	ND ND	ND ND	ND" ND	ND ND
24-MW-27B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND ND	ND ND	ND ND	ND ND
24-MW-31B	NA	NA	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY

Table 8
Summary of Key Contaminants of Concern
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

	T					1,1,1-TC	A ^e (ng/L)						
Committee of the	34. 01	D 00	000	Nov-03/	T 04		,, ,						
Sample Location Shallow Zone Wells	May-01	Dec-02	Oct-03	Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
24-PMW-1	ND	7.2	NA	5.7	NA	NA	NA	0.57	3	2.4	3	NID	1*
24-PMW-2	ND	1.6	NA	ND	NA NA	NA NA	NA NA	ND	ND	2.4 ND	1.1	ND ND	0.23
24-PMW-3	12.4	8.6	NA	5.3	NA	NA	NA	0.89	1	0.89	ND	0.21	0.42
24-PMW-4	684	757	NA	1,370	NA	NA	NA	1,700	5,000	2,600	1,100	1,300	620
24-PMW-5	886	794	NA	2,200	NA	NA	NA	1,500	1,500	1,300	1,800	480	180
24-PMW-8	NA	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.31	ND	ND
24-PMW-8-2 24-PIW-8-1	NA NA	NA NA	ND NA	ND NA	ND NA	ND NA	ND	ND	ND	ND	ND	ND	ND
24-PIW-8-2	NA NA	NA NA	ND	ND	NA ND	NA ND	NA ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
24-PMW-9	NA	ND	NA	DRY	NA	NA	NA	DRY	DRY	ND	ND	ND	ND
24-PMW-10	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-11	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-13	NA	ND	NA	ND	NA	NA	NA	DRY	ND	ND	ND	ND	ND
24-PMW-18	NA	0.30	NA	0.3	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-19	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-21	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-22	NA	NA	NA	NĐ	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-26 Intermediate Zone Wells	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
	1 170	ND	27.4	N/D								*	
24-MW-2 24-MW-3A	ND NA	ND ND	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND*	ND ND
24-MW-4A	NA.	NA	NA NA	DRY	NA NA	NA NA	NA NA	DRY	DRY	DRY	DRY	ND DRY	ND DRY
24-MW-5A	195	156	NA	127	NA	NA	NA	77	65	80	62	65	66
24-MW-6	NA	NA	NA	1.3	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-7	ND	ND	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-8A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-8A-2	NA	NA	ND	ND	ND	0.42	ND	ND	ND	ND	ND	ND	ND
24-MW-9A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10A	NA NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-11A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-12A 24-MW-13A	NA NA	ND	NA	ND	NA	NA	NA	0.29	ND	ND	ND	ND*	ND
24-MW-14A	NA NA	ND ND	NA NA	DRY ND	NA NA	NA NA	NA NA	DRY ND	DRY 0.59	DRY ND	DRY ND	DRY	DRY
24-MW-15A	NA	ND	NA	ND	NA	NA NA	NA	ND	ND	ND ND	ND ND	ND ND	ND ND
24-MW-22A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-26A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-28A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-29A	NA NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-30A Deep Zone Wells	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-3B	ND	ND	NA	ND	NA	NA	NA	ND	NID	NID	ND	ND	NID*
24-MW-4B	NA NA	ND	NA.	ND	NA NA	NA NA	NA NA	ND ND	ND	ND ND	ND	ND*	ND*
24-MW-5B	101	136	NA NA						ND		ND	ND*	ND
				136	NA	NA	NA	NA	110	95	95	83	66
24-MW-8B 24-MW-9B	NA NA	ND	NA NA	ND	NA NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-9B 24-MW-10B	NA NA	ND	NA.	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10B 24-MW-11B	NA NA	ND ND	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND	ND ND	ND	ND*	ND
24-MW-12B	NA NA	ND ND	NA NA						ND	ND	ND.	ND*	ND
24-MW-13B	1			ND ND	NA NA	NA NA	NA NA	ND	ND	ND	ND	ND*	ND
	NA NA	ND	NA NA	ND	NA NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-14B 24-MW-15B	NA NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
	NA NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-16B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-17B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-19B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-20B	NA NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-21B 24-MW-22B	NA NA	NA NA	NA Na	ND ND	NA NA	NA NA	NA NA	ND ND	ND	ND	ND	ND	ND
24-MW-23B	NA NA		NA NA	ND ND	NA NA	NA NA	NA NA	ND	ND	ND	ND	ND*	ND
	i	NA NA	NA NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-24B	NA NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND"	ND
24-MW-25B 24-MW-26B	NA NA	ND NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND	ND	ND.	ND	ND*	ND
24-MW-27B	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
24-MW-31B	NA.	NA	NA	ND	NA	NA	NA NA	DRY	DRY	DRY	DRY	DRY	DRY

Table 8
Summary of Key Contaminants of Concern
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

-						1,1,2-TC	A f (mg/L)						
Samula Y and an	3.5 0.1	D 00		Nov-03/									
Sample Location Shallow Zone Wells	May-01	Dec-02	Oct-03	Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
24-PMW-1	ND	ND	NA	ND	NA	NA	NA	NID	10	20			*
24-PMW-2	ND	ND	NA	ND	NA NA	NA NA	NA NA	ND ND	10 1.2	38 0.46	12 ND	ND ND	9.8*
24-PMW-3	ND	ND	NA	ND	NA	NA	NA	ND	0.36	0.40	ND ND	ND ND	ND 0.21
24-PMW-4	1.73	3.5	NA	5.4	NA	NA	NA	9.9	17	11	6.3	5.7	4.9
24-PMW-5	2.16	3.1	NA	10.8	NA	NA	NA	13	16	12	12	4.1	2.7
24-PMW-8	NA	ND	ND	0.76	0.49	0.33	0.5	ND	ND	ND	ND	ND	ND
24-PMW-8-2	NA	NA	ND	ND	ND	0.31	ND	ND	ND	0.21	ND	ND	ND
4-PIW-8-1	NA	NA	NA	NA	NA	NA	NA	ND	. ND	ND	ND	ND	ND
24-PIW-8-2	NA	NA	0.63	ND	ND	ND	ND	ND	ND	0.21	0.63	ND	ND
4-PMW-9 4-PMW-10	NA NA	ND ND	NA	DRY	NA	NA	NA	DRY	DRY	ND	ND	ND	ND
4-PMW-11			NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
4-PMW-13	NA NA	ND ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
			NA	ND	NA	NA	NA	DRY	ND	ND	ND	ND	ND
4-PMW-18	NA	ND	NA	ND	NA	NA	NA	0.43	0.81	ND	0.47	ND	0.66
4-PMW-19	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND^*	ND
4-PMW-21	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
4-PMW-22	NA	NA	NA	ND	NA	NA	NA	ND	0.5	0.55	0.42	ND	ND
4-PMW-26	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
ntermediate Zone Wells	_												
4-MW-2	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
4-MW-3A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
4-MW-4A	NA	NA	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
4-MW-5A	ND	0.58	NA	0.63	NA	NA	NA	4.6	0.82	1	0.96	0.84	1
4-MW-6	NA	NA	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
4-MW-7	ND	ND	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
4-MW-8A	NA	1.9	NA	ND	NA	NA	NA	0.28	0.38	0.35	ND	0.32	0.36
4-MW-8A-2	NA	NA	0.37	ND	ND	0.47	ND	0.64	0.68	0.48	0.64	0.47	0.31
4-MW-9A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
4-MW-10A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
4-MW-11A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
4-MW-12A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
4-MW-13A	NA	ND	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
4-MW-14A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
4-MW-15A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
4-MW-22A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND^*
4-MW-26A	NA	NA	NA	ND	NA	NA	NA	0.37	0.57	0.38	0.47	0.22	0.3
4-MW-28A 4-MW-29A	NA NA	NA NA	NA NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
4-MW-30A	NA NA	NA NA	NA NA	ND	NA NA	NA	NA	ND	ND	ND	ND	ND	ND
eep Zone Wells	IVA	INA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
4-MW-3B	ND	ND	NA	ND	NA	NA	NIA	NID	ND) ID			*
4-MW-4B	NA	ND					NA	ND	ND	ND	ND	ND	ND*
ľ			NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
4-MW-5B	2.64	5	NA	4.2	NA	NA	NA	NA	6	5.4	5.1	3.8	6.2
4-MW-8B	NA	ND	NA	ND	NA	NA	NA	0.41	ND	0.5	0.55	0.46	0.45
1-MW-9B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND.	ND	ND	ND*
I-MW-10B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
1-MW-11B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
I-MW-12B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
-MW-13B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
I-MW-14B	NA	ND	NA	NĐ	NA	NA	NA NA	0.51					
I-MW-15B	NA	ND	NA	ND					0.67	0.59	0.88	0.7*	0.54
-MW-16B					NA	NA	NA	ND	ND	ND	ND	ND*	ND
	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
-MW-17B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
I-MW-19B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
I-MW-20B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
I-MW-21B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
I-MW-22B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
I-MW-23B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
I-MW-24B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
	NA	NA	NA	NĐ	NA	NA	NA	ND	ND ND	ND ND			
I-MW-25B					4 74 2	4 1 Ck	1177	IND	עאו	ND	ND	ND"	ND
I-MW-25B I-MW-26B	NA	NA		ND	NA	NA	NA	ND	ND	ND	ND	ND	NID
i i			NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND

Table 8
Summary of Key Contaminants of Concern
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

						1,1-DCA	h (ug/L)						
Cample I coeffee	Mar. 01	D., 02	0-4.02	Nov-03/	T 04			E 11.04	*** **	~ ^=	~		
Sample Location Shallow Zone Wells	May-01	Dec-02	Oct-03	Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
24-PMW-1	31.1	18.6	NA	18	NA	NA	NA	15	21	24	18	19	15*
24-PMW-2	ND	ND	NA	ND	NA	NA NA	NA NA	ND	ND	ND	0.29	ND	ND
24-PMW-3	5.92	5.8	NA	4.3	NA	NA	NA	4.6	4.8	4.8	4	4	4.2
24-PMW-4	154	247	NA	484	NA	NA	NA	880	1,500	970	600	610	510
24-PMW-5	192	192	NA	326	NA	NA	NA	320	310	300	280	210	110
24-PMW-8	NA	0.45	ND	ND	ND	ND	ND	ND	ND	0.35	ND	ND	ND
24-PMW-8-2	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24-PIW-8-1 24-PIW-8-2	NA NA	NA NA	NA ND	NA ND	NA ND	NA ND	NA ND	ND ND	ND	ND	ND	ND	ND
24-PMW-9	NA NA	ND	NA NA	DRY	NA	NA	NA	DRY	ND DRY	ND ND	ND ND	ND ND	ND ND
24-PMW-10	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-11	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-13	NA	ND	NA	ND	NA	NA	NA	DRY	ND	ND	ND	ND	ND
24-PMW-18	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-19	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-21	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-22	NA NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-26	NA.	NA	NA NA	ND	NA	NA.	NA	ND	ND	ND	ND	ND	ND
Intermediate Zone Wells													
24-MW-2	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-3A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-4A	NA	NA	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-5A	42.7	26.9	NA	23.9	NA	NA	NA	89	24	35	30	27	34
24-MW-6	NA ND	NA	NA	ND	. NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-7	ND	ND	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-8A 24-MW-8A-2	NA NA	0.5 NA	NA ND	0.42	NA ND	NA	NA ND	0.43	0.5	0.47	0.42	0.39	0.39
24-MW-9A				ND		ND	ND	ND	ND	ND	ND	ND	ND
24-MW-10A	NA NA	ND ND	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND [*] ND
24-MW-11A	NA NA	ND	NA	ND	NA.	NA NA	NA.	0.25	ND ND	ND ND	ND ND	ND ND	
24-MW-12A	NA NA	ND	NA.	ND	NA.	NA NA	NA.	ND				ND*	ND
24-MW-13A	NA NA	ND	NA NA	DRY	NA NA	NA NA	NA NA	DRY	ND DRY	ND DRY	ND DRY	DRY	ND DRY
24-MW-14A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-15A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-22A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-26A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-28A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-29A 24-MW-30A	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND	ND	ND	ND	ND	ND
Deep Zone Wells	NA.	INA	IVA	ND	INA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-3B	ND .	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-4B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-5B	68.3	78.5	NA	82	NA	NA	NA.	NA	110	91	100	93	92
24-MW-8B	NA												
24-WW-9B	NA NA	0.88 ND	NA NA	0.97 ND	NA NA	NA NA	NA NA	0.81	1.1 ND	0.9	0.9	1	0.85
					NA NA	NA NA	NA	ND	ND	ND	ND	ND*	ND*
24-MW-10B 24-MW-11B	NA NA	ND ND	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND" ND	ND
24-MW-12B	NA NA	ND	NA NA	ND ND	NA NA		NA NA						ND
24-MW-13B	NA NA	ND ND				NA NA		ND	ND	ND	ND	ND*	ND
			NA NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-14B	NA NA	ND	NA	ND	NA	NA	NA	ND	ND	0.2	ND	0.25*	ND
24-MW-15B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-16B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-17B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-19B	NA.	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-20B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-21B	NA NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-22B	NA	NA	NA	ND	NA	NA	NA	ND	ND	· ND	ND	ND *	ND
24-MW-23B	NA	NA	NA	ND	NA	NA	NA	ND	ND	0.35	0.38	0.43*	0.43
24-MW-24B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	· ND	ND*	ND
24-MW-25B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-26B	NA NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-27B 24-MW-31B	NA NA	NA NA	NA NA	ND	NA NA	NA NA	NA	ND	ND	ND	ND	ND	ND
4T-141 W "J1D	NA	NA	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY

Table 8
Summary of Key Contaminants of Concern
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

						1,2-DCA	i (ug/L)				···		
Sample Leastion	May-01	Dec-02	Oct-03	Nov-03/	Ion 04			E-11.04	W. 05	G 05		E 11 07	***
Sample Location Shallow Zone Wells	May-01	Dec-02	Oct-03	Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
24-PMW-1	396	169	NA	220	NA	NA	NA	270	220	15	260	260	310*
24-PMW-2	ND	4.4	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-3	ND	0.58	NA	0.81	NA	NA	NA	1.7	1.7	1.3	4.1	0.61	1
24-PMW-4	ND	ND	NA	2.3	NA	NA	NA	3.2	6.5	3.9	1.8	1.9	1.7
24-PMW-5	ND	ND	NA	1.8	NA	NA	NA	2	2.1	1.8	1.5	0.64	0.44
24-PMW-8	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24-PMW-8-2	NA NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24-PIW-8-1 24-PIW-8-2	NA NA	NA NA	NA ND	NA ND	NA ND	NA ND	NA ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND
24-PMW-9	NA	ND	NA	DRY	NA	NA NA	NA NA	DRY	DRY	ND	ND ND	ND ND	ND ND
24-PMW-10	NA	ND.	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-11	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-13	NA	ND	NA	ND	NA	NA	NA	DRY	ND	ND	ND	ND	ND
24-PMW-18	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-19	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-21	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-22	NA	NA.	NA NA	ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
24-PMW-26	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
Intermediate Zone Wells			- :							. 127	. 12/		110
24-MW-2	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-3A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-4A	NA	NA	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-5A	0.845	ND	NA	ND	NA	NA.	NA	6.9	0.53	0.65	0.68	0.53	0.64
24-MW-6	NA	NA	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-7	ND	ND	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-8A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-8A-2	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24-MW-9A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-11A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-12A 24-MW-13A	NA NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-14A	NA NA	ND ND	NA NA	DRY ND	NA NA	NA NA	NA NA	DRY ND	DRY ND	DRY ND	DRY	DRY	DRY
24-MW-15A	NA.	ND	NA.	ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
24-MW-22A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-26A	NA	NA	· NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-28A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-29A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-30A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
Deep Zone Wells													_
24-MW-3B	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-4B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-5B	8.57	6.5	NA	8.9	NA	NA	NA	NA	9.3	8.8	8.8	7.2	9.4
24-MW-8B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-9B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND^*	ND
24-MW-11B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-12B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-13B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-14B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-15B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-16B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-17B	NA	ND	NA	ND	NA NA	NA NA	NA.	ND ND	ND	ND ND	ND ND	ND*	
24-MW-19B	NA.	NA NA	NA NA	ND	NA.								ND
24-MW-20B						NA NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-20B 24-MW-21B	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND	ND ND	ND ND	ND
24-MW-22B	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
24-MW-23B	NA	NA.	NA NA	ND	NA NA								
						NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-24B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-25B 24-MW-26B	NA NA	ND NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND	ND	ND	ND	ND*	ND
24-MW-26B 24-MW-27B	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
								INII			INIT		

Table 8
Summary of Key Contaminants of Concern
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

	T					rg AFB, Ca							
				Nov-03/		Benzene	' (μg/L)						
Sample Location	May-01	Dec-02	Oct-03	Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
Shallow Zone Wells													
24-PMW-1	1,620	940	NA	810	NA	NA	NA	980	650	1,200	1,100	1,100	930*
24-PMW-2	3.69	8.7	NA	3.3	NA	NA	NA	2.8	3.5	3.4	3.4	2.2	4.2
24-PMW-3 24-PMW-4	ND ND	1.9 0.57	NA NA	2.2 0.61	NA NA	NA NA	NA	3.9	5.9	3.5	10	3.1	3.9
24-PMW-5	ND	ND	NA NA	ND	NA NA	NA NA	NA NA	0.55 0.21	0.64 0.29	0.46 ND	0.38 0.2	0.47	0.56
24-PMW-8	NA	ND	ND	ND	ND	ND	ND	ND				0.36	0.33
24-PMW-8-2	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
24-PIW-8-1	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND ND	ND ND
24-PIW-8-2	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24-PMW-9	NA	ND	NA	DRY	NA	NA	NA	DRY	DRY	ND	ND	ND	ND
24-PMW-10	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-11	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-13	NA	ND	NA	ND	NA	NA	NA	DRY	ND	ND	ND	ND	ND
24-PMW-18	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-19	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-PMW-21	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-22	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	0.23
24-PMW-26	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
Intermediate Zone Wells													
24-MW-2	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-3A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-4A	NA	NA	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-5A	ND	ND	NA	ND	NA	NA	NA	0.42	ND	ND	ND	0.27	ND
24-MW-6	NA	NA	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-7	ND	ND	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-8A	NA	ND	NA	ND	NA	NA	NA	ND	0.25	ND	ND	ND	ND
24-MW-8A-2	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24-MW-9A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-11A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-12A	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-13A 24-MW-14A	NA NA	ND	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-15A	NA NA	ND ND	NA NA	ND ND	NA NA	NA NA	NA NA	ND	ND	ND	ND	ND	ND
24-MW-22A	NA	NA	NA.					ND	ND	ND	ND	ND	ND
24-MW-26A	NA NA	NA NA	NA NA	ND ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND	ND	ND*
24-MW-28A	NA	NA	NA	ND	NA NA	NA	NA.	ND	ND	ND ND	ND ND	ND ND	ND ND
24-MW-29A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-30A	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
Deep Zone Wells													
24-MW-3B	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-4B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-5B	ND	0.51	NA	0.47	NA	NA	NA	NA	0.87	0.66	0.48	0.45	0.51
24-MW-8B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-9B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-10B	NA	ND	NA.	ND	NA.	NA							
24-MW-11B	NA.	ND	NA.	ND	NA NA	NA NA	NA NA	ND ND	ND ND	ND ND	ND ND	ND* ND	ND ND
24-MW-12B	NA	ND	NA	ND	NA								ND
24-MW-13B						NA	NA	ND	ND	ND	ND	ND*	ND
	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND.	ND
24-MW-14B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND T	ND
24-MW-15B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-16B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-17B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-19B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-20B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-21B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-22B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-23B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-24B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-25B	NA	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-26B	NA	NA	NA	ND	NA	NA	NA NA	ND	ND	ND	ND	ND ND	ND ND
24-MW-27B	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-31B	NA	NA	NA	ND	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY

Table 8 Summary of Key Contaminants of Concern IRP Site 24 (Entomology Wash Rack) Vandenberg AFB, California

Sample Location							ТРН	(mg/L)		<u></u>				 .
Shaffur Zare Wells	ample Location	May-01	Dec-02	Oct-03		Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
24-PMW-2	nallow Zone Wells							200 01	2 444 0 7		5p1-05	Buil-05	Tail-03	***III-00
24-PMW-2	I-PMW-1	11.7	5.1	NA	NA	NA	NA	NA	11	9.5	6.5	6.7	5.4	6.4*
24-PMW-4	I-PMW-2	0.035	0.490	NA	NA									2
24-PMW-5				NA	NA	NA	NA	NA	0.22	0.34	ND	0.068	0.19	0.24
24-PHVW-8; NA											ND	0.098	0.1	0.09
24-PMW-8-2 NA				NA	NA	NA	NA	NA		0.083	ND	0.085	0.064	0.092
24-PIW-4-1									0.021^{m}	0.027^{m}	ND	ND	0.35^{m}	4.1 ^m
24-PIW-8-2														NA
24-PMW-9 NA ND NA ND NA														NA
24-PMW-10														NA
24-PMW-11 NA NA NA NA NA NA NA NA NA														NA NA
24-PMW-13 NA														
24-PMW-18 NA														NA NA
24-PMW-19														NA
24-PMW-21 NA NA NA NA NA NA NA NA NA N														22 ⁿ
24-PMW-22									NA	ND	ND		ND*	ND
24-PMW-26				NA	NA	NA	NA	NA			ND	0.02^{m}	0.024^{m}	NA
Intermediate Zone Wells							NA	NA	1.5 ^m	5.6 ^m	2.2 ^m	2.2^{m}	2.4^{m}	2.6 ⁿ
24-MW-22		NA	NA	NA_	NA_	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-34 NA NA NA NA NA NA NA NA NA N		0.0314	NA	NA	NΔ	NΔ	NΔ	NΑ	0 001 ^m	0.12 ^m	ND	0.040 ^m	0.02*,m	NA
24-MW-4A NA NA NA NA NA NA NA NA NA														NA NA
24-MW-5A 0.124 0.150 NA														DRY
24-MW-6 NA N	-MW-5A													NA NA
24-MW-8A NA NA NA NA NA NA NA NA NA														DRY
24-MW-86														DRY
24-MW-8A-2 NA														
24-MW-9A NA NA NA NA NA NA NA NA NA														NA NA
24-MW-10A NA														
24-MW-11A NA														NA NA
24-MW-12A														
24-MW-13A														NA
24-MW-15A NA														NA
24-MW-15A NA NA NA NA NA NA NA ND														DRY
24-MW-26A NA NA NA NA NA NA NA NA NA														NA NA
24-MW-26A NA														
24-MW-28A NA														NA NA
24-MW-29A NA														NA NA
24-MW-30A														NA NA
Deep Zone Wells 24-MW-3B	-MW-30A	NA	NA											NA
24-MW-4B NA NA NA NA NA NA NA NA NA N	eep Zone Wells		-										*	
24-MW-5B 0.069 NA NA NA NA NA NA NA 0.046" ND 0.027 0.023 24-MW-8B NA NA <th< td=""><td>-MW-3B</td><td>ND</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>NA</td></th<>	-MW-3B	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA
24-MW-8B NA <	-MW-4B	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND*	NA
24-MW-9B NA ND NA <	-MW-5B	0.069	NA	NA	NA	NA	NA	NA	NA	0.046^{m}	ND	0.027	0.023	0.064
24-MW-9B NA ND NA ND NA <	-MW-8B	NA	NA	NA	NA	NA	NA	NA	0.28 ^m	0.29 ^m	ND	0.27^{m}	0.28 ^m	NA
24-MW-10B NA NA NA NA NA NA NA NA NA 0.032 ^m 0.032 ^m ND 0.032 ^m 0.021 ^m 0.021 ^m 0.21 ^m	-MW-9B	NA	ND											NA
24-MW-11B NA NA NA NA NA NA NA ND														
24-MW-12B NA NA NA NA NA NA ND ND ND ND ND ND* 24-MW-13B NA NA NA NA NA NA NA NA 0.21 m 0.22 m 0.03 m 0.04 m 0.04 m 0.04 m 0.04 m														NA NA
24-MW-13B NA NA NA NA NA NA NA NA 0.19 0.18 ^m 0.21 ^m 0.02 ^m 0.03 ^m 0.05 ^m 0.05 ^m 0.05 ^m 0.05 ^m 0.05 ^m														
24-MW-14B NA NA NA NA NA NA NA NA 0.41 0.49 ^m ND 0.4 ^m 0.38*.m 24-MW-15B NA NA NA NA NA NA NA ND														NA
24-MW-15B NA NA NA NA NA NA NA ND														NA
24-MW-16B NA NA NA NA NA NA NA ND ND ND ND 0.044 ^m 24-MW-17B NA NA </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>NA</td> <td>0.41</td> <td>0.49^m</td> <td>ND</td> <td>0.4^m</td> <td></td> <td>NA</td>								NA	0.41	0.49 ^m	ND	0.4 ^m		NA
24-MW-17B NA NA NA NA NA NA NA NA 0.067 ^m 0.058 ^m ND 0.045 ^m 0.05* ^m 24-MW-19B NA NA NA NA NA NA NA ND ND <td></td> <td></td> <td></td> <td></td> <td></td> <td>NA</td> <td>NA</td> <td>NA</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND*</td> <td>NA</td>						NA	NA	NA	ND	ND	ND	ND	ND*	NA
24-MW-19B NA NA NA NA NA NA NA NA NA ND ND ND ND* 24-MW-20B NA	-MW-16B	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND		NA
24-MW-19B NA NA NA NA NA NA NA NA NA ND ND ND ND* 24-MW-20B NA	-MW-17B	NA	NA	NA	NA	NA	NA	NA	0.067^{m}	0.058^{m}	ND	0.045^{m}	0.05*, m	NA
24-MW-20B NA	-MW-19B	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		NA
24-MW-21B NA NA NA NA NA NA NA NA ND ND ND ND 24-MW-22B NA NA NA NA NA NA NA ND 0.065*.	-MW-20B	NA	NA											NA
24-MW-22B NA NA NA NA NA NA NA ND														NA NA
24-MW-23B NA NA NA NA NA NA NA NA ND ND ND 0.032 ^m 0.065* m 24-MW-24B NA NA NA NA NA NA NA ND ND <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>NA</td></t<>														NA
24-MW-24B NA NA NA NA NA NA NA ND ND ND ND ND*	-MW-23B													NA
ALAENAED.														
TIME INA NA N	1													NA
AA DETTI ACD	ı													NA
AA BATTU AND														NA
24-MW-27B NA														NA DRY

Table 8
Summary of Key Contaminants of Concern
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

						TPHd	(mg/L)				70.0		···
				Nov-03/			_						
Sample Location	May-01	Dec-02	Oct-03	Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
Shallow Zone Wells	2.050		27.1	27.1									*
24-PMW-1 24-PMW-2	3.850 0.124	1 0.429	NA NA	NA NA	NA NA	NA NA	NA NA	3.2 0.11	3.1	NA	2.8	2.3	2.3*
24-PMW-3	0.124	0.429	NA NA	NA NA	NA NA	NA NA	NA NA	0.11	0.12 0.22	NA NA	0.29 0.38	0.3 0.51	0.24 0.25
24-PMW-4	0.121	0.027	NA	NA	NA	NA	NA	3.4	2.3	1.6	0.75	0.31	0.23
24-PMW-5	0.268	0.062	NA	NA	NA	NA	NA	3.4	3.5	2.1	2.5	0.46	0.36
24-PMW-8	NA	NA	NA	NA	NA	NA	NA	6.1	R	1	1.1	52	110
24-PMW-8-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PIW-8-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PIW-8-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PMW-9 24-PMW-10	NA NA	ND	NA	DRY	NA	NA	NA	DRY	DRY	NA	NA	NA	NA
	ŀ	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-11 24-PMW-13	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	2.2	3.2	2.6	1.3	1.3*	0.91
	1			NA	NA	NA	NA	DRY	ND	ND	0.098	ND	ND
24-PMW-18	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.096	ND	0.1	ND
24-PMW-19	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND*	ND
24-PMW-21	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND
24-PMW-22	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-PMW-26 Intermediate Zone Wells	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	0.10	37.4	37.4	***	374	***	***					*	
24-MW-2 24-MW-3A	0.12 NA	NA ND	NA NA	NA ND	NA NA	NA NA	NA NA	ND	ND	ND	ND	0.15*	ND
24-MW-4A	NA NA	ND NA	NA NA	ND DRY	NA NA	NA NA	NA NA	ND DRY	ND DRY	ND DRY	ND DRY	ND DRY	ND
24-MW-5A	0.178	0.011	NA NA	NA	NA NA								DRY
24-MW-6	0.178 NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	0.18 DRY	ND DRY	ND DRY	ND DRY	ND DRY	ND DRY
24-MW-7	0.168	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-8A	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-8A-2	NA	NA	NA	NA	NA NA	NA	NA NA	NA	NA	NA NA	NA NA	NA	NA NA
24-MW-9A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-10A	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-11A	NA	NA	NA	NA	NA	NA	NA	ND	0.11	0.13	0.14	0.12	0.1
24-MW-12A	NA	NA	NA	NA	NA	NA	NA	0.33	0.15	0.3	0.22	0.21*	0.15
24-MW-13A	NA	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-14A	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-15A	NA	NA	NA	NA	NA	NA	NA	0.32	ND	ND	ND	ND	ND
24-MW-22A	NA	NA	NA	NA	NA	NA -	NA	ND	ND	ND	ND	ND	ND*
24-MW-26A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-28A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-29A 24-MW-30A	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA
Deep Zone Wells	INA	INA	INA	INA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-3B	0.043	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND*
24-MW-4B	i											_	
	NA 0.118	NA NA	NA	NA NA	NA	NA	NA	0.61	0.2	ND	0.25	0.39	0.19
24-MW-5B	0.118	NA	NA	NA	NA	NA	NA	NA	0.14	0.23	0.1	0.18	0.11
24-MW-8B	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-9B	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-10B	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-11B	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-12B	NA	NA	NA	NA	NA	NA	NA	0.66	0.47	0.87	0.49	0.48*	0.36
24-MW-13B	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-14B	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-15B	NA	NA	NA	NA	NA	NA	NA	5.5	0.68	ND	ND	ND*	ND
24-MW-16B	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
24-MW-17B	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-19B	NA	NA	NA	NA	NA	NA	NA.	NA	ND	ND	ND ND	ND*	ND ND
24-MW-20B	NA	NA.	NA.	NA NA	NA NA	NA NA	NA NA						
24-MW-21B	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	0.13 ND	0.12 ND	ND 0.15	0.18 0.16	ND ND
24-MW-22B	NA	NA	NA	NA	NA	NA	NA.	4	1.9	0.33	1	0.18	0.4
24-MW-23B	NA	NA	NA.	NA	NA	NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-24B	NA.	NA NA	NA.	NA NA	NA.								
						NA NA	NA	ND	ND	ND	ND	ND*	ND
24-MW-25B 24-MW-26B	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
24-MW-27B	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
24-MW-31B	NA	NA	NA	NA	NA	NA	NA NA	NA.	DRY	DRY	DRY	DRY	DRY

Table 8
Summary of Key Contaminants of Concern
IRP Site 24 (Entomology Wash Rack)
Vandenberg AFB, California

						1,4-Dioxa	ne (μg/L)			·			
Sample Location	May-01	Dec-02	Oct-03	Nov-03/ Dec-03	Jan-04	Aug-04	Dec-04	Fall-04	Win-05	Spr-05	Sum-05	Fall-05	Win-06
Shallow Zone Wells						<u></u>	DCC-04	1 411-04	77111-03	Sp1-03	Sum-03	raii-05	WIN-00
24-PMW-1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PMW-2	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PMW-3	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PMW-4	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	310	R
24-PMW-5	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	59
24-PMW-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PMW-8-2	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PIW-8-1 24-PIW-8-2	NA NA	NA NA	NA NA	NA	NA	NA	NA.	NA	NA	NA	NA	NA	NA
24-PMW-9	NA NA	NA NA	NA NA	NA DRY	NA NA	NA NA	NA	NA	NA	NA	NA	NA	NA
24-PMW-10	NA	NA	NA	NA	NA NA	NA NA	NA NA	DRY NA	DRY NA	NA NA	NA NA	NA NA	NA
24-PMW-11	NA	NA	NA	NA	NA	NA						NA	NA
24-PMW-13	NA NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA DRY	NA NA	NA NA	NA NA	NA NA	NA
24-PMW-18	NA.	NA	NA	NA							NA	NA	NA
					NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PMW-19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PMW-21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PMW-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-PMW-26 Intermediate Zone Wells	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-2	ND	NA	NA	NA	NA	NA	NA	NI A	NI 4	NT A	AT 4	27.4	37.4
24-MW-3A	NA NA	NA.	NA.	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
24-MW-4A	NA	NA	NA	DRY	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-5A	737	NA	NA	NA	NA	NA	NA	1,000	92	130	110	95	110
24-MW-6	NA	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-7	ND	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-8A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-8A-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-9A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-10A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA.	NA	NA	NA
24-MW-11A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-12A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-13A	NA	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY
24-MW-14A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-15A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-22A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-26A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-28A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-29A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-30A Deep Zone Wells	NA_	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-3B	ND	NA	NA	NA	NIA	NYA	NIA	27.4					
24-MW-4B	NA NA	NA NA	NA NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-5B	296	NA	NA	NA	NA	NA	NA	NA	1,700	1,100	R	790	980
24-MW-8B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-9B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-10B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-11B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-12B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-13B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-14B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA.
24-MW-15B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-16B	NA	NA	NA	NA	NA	NA	NA	NA	NA				
24-MW-17B	NA	NA	NA	NA.						NA	NA	NA	NA
					NA.	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-19B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-20B	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-21B 24-MW-22B	NA Na	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-23B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-24B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-25B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-26B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-27B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24-MW-31B	NA	NA	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	DRY	DRY

Table 8 Summary of Key Contaminants of Concern IRP Site 24 (Entomology Wash Rack) Vandenberg AFB, California

			Vandenberg AFB, California
Definition	n(s):		
	DCA	-	dichloroethane
	DCE	-	dichloroethene
	DRY	-	Well was dry or had insufficient water for sampling.
	NA	-	not analyzed
	ND	-	Not detected; result is less than the method detection limit.
	μg/L	-	micrograms per liter
	mg/L	-	milligrams per liter
	PCE	-	tetrachloroethene
	R	-	The data were rejected through the validation process.
	TCA	-	trichloroethane
	TCE	-	trichloroethene
	TPHd	-	total petroleum hydrocarbons as diesel
	TPHg	-	total petroleum hydrocarbons as gasoline
Note(s):			
	Bold typ	e ind	licates results that were above the MCL.
	a	-	The MCL for PCE is 5 µg/L.
	b	-	The MCL for TCE is 5 μg/L.
	c	-	The MCL for cis-1,2-DCE is 6 μg/L.
	đ	-	The MCL for 1,1-DCE is 6 μg/L.
	e	-	The MCL for 1,1,1-TCA is 200 μg/L.
	f	~	The MCL for 1,1,2-TCA is 5 µg/L.
	g	-	The MCL for vinyl chloride is $0.5 \mu g/L$.
	h	-	The MCL for 1,1-DCA is 5 μ g/L.
	i	-	The MCL for 1,2-DCA is 0.5 μg/L.
	j	-	The MCL for benzene is 1 μ g/L.
	k	-	This compound was not detected because the sample was diluted due to the extremely high PCE concentration. This compound is believed to have been present in groundwater during fall 2005, but below detection since dilution raised the detection limit.
	m	-	TPHg detected in groundwater from this well were a result of chlorinated hydrocarbons in the gasoline range since no benzene, toluene, ethylbenzene, or xylenes were detected in groundwater from this well.
	n	-	TPHg detected in groundwater from this well were a result of chlorinated hydrocarbons in the gasoline range since the benzene concentration is very low compared to the very high TCE and/or PCE concentration.
	*	-	First quarter sampled with a dedicated micropurge pump installed.

DATE —			i		
8 >/7/06	Telefax (805) 681-3 108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page _____ of _____

Fe+2 (ppm) WATER LEVEL (370 V				1140 S	137 15	7	1211	621	1127	1125	000/	Time	WATER COLUMN (feet) _ PUMP & TUBING (V) (L)	STATIC WATER LEVEL (ft btoc)	SAMPLE LD. VIL PALL	PROGRAM NAME MONITORING WE	DATE
Fe+2 (ppm) Taken immediately by WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	Vacated well			_	ample	nd Tunge	9				Begin Purge	Arrived at well	Activity	(Y) (L) 5.3(11.6)	EVEL (ft btoc)	HPMW/	PROGRAM NAME MONITORING WELL IDENTIFICATION	96MP
Taken immediately before sampling. VIE OF SAMPLING: (0, 3)					1	-	10.24	61.01	10.14	10.08			Water Level (ft btoc)) +/	77 TOT	DUPLICATE I.D. / COLLECTION TIME 199 N 630	2 TRI	SITE 1
ore sampling.							<u> </u>	17.8	18.01	17.83			Temp (Deg. C)	DIA	TOTAL WELL DEPTH (ft btoc)	COLLECTION	TRUP BLANK I.D	SITE NUMBER
'							804	803	803	807			EC (µmhos/cm)		TH (ft btoc)	TIME 1991	101010	27
FILTER LOT # _							5.81	88	5.84	5385			Hq	SV(L)	2.9	0630	0/0	3
							5.64	6.10	5.84 6.16	6.63			Turbidity (NTU)	5 V(L) 0.8/		//6w	1	
A105 32744							0.71	0.76	9.2	3.80 4.882	0.99		Dissolved Oxygen (mg/L)	SAMPLER"			. SAMPLING DEVICE	- PURGING DEVICE
							03	05	107	(OS			ORP (mV)	SAMPLER'S SIGNATURE		PID READING IN CASING (ppm) PID READING IN BREATHING Z	DEVICE	DEVICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C(1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs							Clear	Clear	clear	Clas			Color	Sala	5	PID READING IN CASING (ppm) (initial) . PID READING IN BREATHING ZONE (ppm) (initial) .		MICROP
WATER QUA							- 1	0.96	0.64	0.32			Volume Purged (L)	M. S.			MICROPURGE DEDICATED PUMP	MICROPURGE DEDICATED PUMP
LITY STABILIZATI Conductivity ± 5% Turbidity 5 NTUs							0.00	6.00	4,00	2.00			Pump & Tubing Volumes Purged	7	2	(vented to)	ATED PUMP	VTED PUMP
ILIZATION / ±5%		ve\Field_W				1	4			- 1	0.16		Flow Rate (LPM)	į		0 C	b	

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA, 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page of

Fe+2 (ppm) WATER LEVEL	525 V	Cic		1416	1R 11	1406	101	35 6 Be	[345 Ar	Time	WATER COLUMN (feet) WELL VOLUME(V) (gals)	STATIC WATER LEVEL (ft btoc)	SAMPLEID. YZ4PHWZ	MONITORING WI	PROGRAM NAME BGMP	DATE 3/6/06
Fe+2 (ppm) Taken from first baile WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	Vacated well	R SA	Sa rurge					Begin Purge	Arrived at well	Activity	(feet) 10.5 V) (gals) 1.69		24Pmw2	MONITORING WELL IDENTIFICATION	BGMP	Č
aken from f E OF SAMI			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	**	*	ા પ. ટર્મ	11.76			Water Level (ft btoc)		8.35	DUPLI			
irst bailer in			_	-1		_	_	18.2		Pump Depth (ft btoc)	CASING I	ТОТА	CATE I.D. /	24-PMW-7	TRUP	– SITE NU
mmediately I		6.17		27.8	18.22	17.80	17.14			Temp (Deg. C)	I S	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	2-7	TRIP BLANK I.D.	SITE NUMBER 24
Taken from first bailer immediately before sampling ME OF SAMPLING: 2.37 FII TER		0	77/	792	771	734	745			EC (µmhos/cm)	<u> </u>	- 1	TIME		V247B1209	A
sampling.		77.0	2 0 0	5.75	5.84	5.89	5.95		-) pH	3AILER BO	18.8			3 (20	
A10532744			769	30.1	76.3	<u> </u>	621			Turbidity (NTU)	BAILER BOX # 204		1		-	
2744		7.60	7.7	0.49	1.04	1.70	1.86			Dissolved Oxygen (mg/L)	SAMPLER'S SIGNATURE		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
		:	٥ و	139.9	136.0	173.1	137.5			ORP (mV)	SIGNATURE		G IN BREATHIN	PID READING IN CASING (ppm)	DEVICE	EVICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C (1.8 F) Conductivity ±5%				cloudy	cloudy	cloudy	cloudy			Color	M. P.	1	ONE (ppm)	ppm) (initial) _	DISPO	2" SUB
S FOR WATER QU.				0.0	7.5	5.0	2.5			Volume Purged (gals)		.1	0,0	AS	DISPOSABLE TEFLON BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
ALITY STABILIZAT Conductivity ± 5%				5.91	44.7	2.96	- 노 *			Well Volumes Purged			(vented to)	(vented to)	V BAILER	UNDFOS PUM
3ILIZATION				4				0.5	-	Flow Rate (GPM)			0.0	0.0	j	P

and the second of the second

ij
CULTE
ber
i.
-049
(9/05)

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3108
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page 1 of 1

WATER LEVI	Fe+2 (ppm) -								(022	1021	११०।	lol\$	10[2	0950	Time	PUMP & TUBING (V) (L)	WATER COLUI	STATIC WATER	SAMPLE I.D.	MONITORING	PROGRAM NAME	DATE 3
WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	vacated well	- 1						5	End Dime				Begin Purge	Arrived at well	Activity	NG (V) (L) 0.27	WATER COLUMN (feet) 3-7	STATIC WATER LEVEL (ft bioc) 35.34	SAMPLE I.D. V24 MW2 DUPLICATE I.D. / COLLECTION TIME	MONITORING WELL IDENTIFICATION	ME 1861	16/08
TIME OF SAMPLING: 35.74 FILT	immediately bef								me -	44.24	14.36	35.69			Water Level (ft btoc)	۲			OUPLICATE I.D. /	24	TRII	SITE
4.55	ore sampling									14.75	14.4	14.65			Temp (Deg. C)		TUBING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION	22・201	TRIP BLANK I.D	SITE NUMBER
FILTER										860	ļ	862			EC (μπλοs/cm)		SR (in)	TH (ft btoc)	TIME	١.,	12470 1209	24
LOT#										1919	6.16	15.0 N.9			pH	5 V (L)	1/4	0 12	1		(C) (2)	
Alp										ري. ر	6.16 0.53	271			Turbidity (NTU)	1.10					9	
FILTER LOT # 1/05 12744										4.46	4.61	4. 87			Dissolved Oxygen (mg/L)	'	- SAMPEER"	•	PID READI	PID READ!	SAMPLING DEVICE	PURGING DEVICE
										ンだっ	38.2	4.6			ORP (mV)		SAMPEER'S SIGNATURE		PID READING IN BREATHING	PID READING IN CASING (com)	DEVICE	DEVICE -
Temperature ±1 C(1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs										(los	Chen	Clem			Color	J-86	W.		ING ZONE (ppm) (initial) -		MICROP	MICROP
(1.8 F)										\ 	٠. ١	٥.لار			Volume Purged (L)	a cy			6.0	0	URGE DEDI	URGE DEDIG
Conductivity ± 5% Turbidity 5 NTUs										75.4	۲.۷	214			Pump & Tubing Volumes Purged	いんが			(vented to)	(vented to)	MICROPURGE DEDICATED PUMP	MICROPURGE DEDICATED PUMP
SILIZATION S HTUS	X:\IRP	Drive\Fi	eld_Work\	Field_Co	oordinat	ion\Form	ns\Tto(42,Fiel	d_Data_	Log_S	heet_MI		0.16		Flow Rate (LPM)				0	0		

TEIRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page ____ of ____

DATE	317106		SITE NUMBER	MBER	24	<u> </u>		U UNIU ALIA	EVICE	2" SUBME	RSIBLE GRU	2" SUBMERSIBLE GRUNDFOS PUMP	70
PROGRAM NAME	IAME BGMP		TRJP I	TRIP BLANK I.D.	V24 TB121	11218		SAMPLING DEVICE	DEVICE	DISPOSA	DISPOSABLE TEFLON BAILER	N BAILER	
MONITORIN	MONITORING WELL IDENTIFICATION		24- PMW-3	NW - 3				PID READIN	PID READING IN CASING (ppm)		0.3	(vented to)	0.0
SAMPLE I.D.	SAMPLEID. YZY PWW3	DUPLI	ICATE I.D. / C	DUPLICATE I.D. / COLLECTION TIME	TIME	-/-	1	PID READIN	IG IN BREATHIN	ONE (ppm)	0.1	(vented to)	0.0
STATIC WAT	STATIC WATER LEVEL (ft btoc)	10.27	LATOT	TOTAL WELL DEPTH (ft btoc)	ΓΗ (ft btoc)	20.				•			
WATER COLUMN (feet)	i	9.8	CASI	CASING DIAMETER (in)	R (in)	2		SAMPLER'S	SAMPLER'S SIGNATURE	4	1400	4.	
WELL VOLU	ls)	6	3 V (gals)	gals) <u>4.7</u>		BAILER BOX #	# 204	2		M. A	}		
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	рН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
0920	Arrived at well												
0925	Begin Purge		19.5										0.50
0929		14.05		16.75	724	24.3	13.6	1-13	-56.7	clear	2.00	9.50	_
0933		16.32	-	17.81	206	6.52	6.26	0.70	-37.2	clear	4.00	2.50	
0936	End Purge.	- Well	7										
5541	SAMPLE	12.48	ار	18.17	785	6.65	44.8	6.13	134.3	clear	١	١	•
1442	Vacated well												
Fe+2 (ppm)		laken from f	irst bailer in	nmediately b	Taken from first bailer immediately before sampling	16:			 	PARAMETERS FOR WATER OUALITY STARILIZATION	ATER OU	ALITY STAF	NO LA ZI III
WATER LEV	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	E OF SAM	PLING: _	12.48	FILTER LOT #	LOT#.	AI	\$ 10t 32TUH		Temperature ±1 C(1.8 F) pH ±0.1	1.8 F)	Conductivity ± 5% Turbidity 5 NTUs	y ±5% 5 NTUs



Page ____ of ____

DATE 8	MARCH	9005	SITE NUMBER		24			PURGING DEVICE	EVICE	2" SUBMI	ERSIBLE GR	2" SUBMERSIBLE GRUNDFOS PUMP	יסי
PROGRAM NAME	IAME Dane	10	TRUP	TRIP BLANK I.D.	V241	V24781212	P	SAMPLING DEVICE	DEVICE	DISPOSA	DISPOSABLE TEFLON BAILER	N BAILER	
, MONITORIN	, MONITORING WELL IDENTIFICATION		24 - M V	MW-3A	:			PID READIN	PID READING IN CASINC (ppm)		g.0	(vented to)	0.0
SAMPLE I.D.	V24MW3A	1	CATE I.D. / O	DUPLICATE I.D. / COLLECTION TIME	TIME		1	PID READIN	G IN BREATHIN	ONE (ppm)	0.0		1_ 1
STATIC WATE	STATIC WATER LEVEL (ft btoc)	37.34	TOTA	TOTAL WELL DEPTH (ft btoc)	H (ft btoc)	1.44.7	7)	5	\	
WATER COLUMN (feet)		1.38	4	CASING DIAMETER (in)	R (in)	L		SAMPLER'S SIGNATURE	SIGNATURE			X	
WELL VOLUME (V) (gals)		4.80	3 V (gals)		14.4 BA	BAILER BOX # 205	(# 205			144	1		
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (μmhos/cm)	pН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
0910	Arrived at well												
0925	Begin Purge		44										0.50
्930		38.90		71.01	1582	6.14	7.60	6.13	2.0	CLEAP	2.5	0.52	
0935		39.86		19.90	1640	6.32	1.75	6.07	-3.5	CLEAR	5.0	1.04	
०१५०		5.56		10.14	1683	6.31	020	6 - 11	-5.0	CLEAR	ب. ب	1.60	,
2450		41.26		20.39	1697	6.41	1.81	5.4	-5.2	CLEAR	10.0		
0950		41-81		20.63	11711	6.46	1.39	5.95	-6.6	CLEAR	12.5	2.60	<u> </u>
0955		42.20	-	20.75	1720	6 .49	1.42	5.78	-7-3	CLEAR	0.51	3.13	
9860	END PURGE	1											
\$ 7	SAMPLE			\q. 52	4961	5.50	2.20	6.35	4.45	CLEAR	\		
							1						
													Orive\Field
1010	Vacated well												
Fe+2 (ppm)		laken from f	īrst bailer ir	nmediately b	Taken from first bailer immediately before sampling	.9r	,	•		PARAMETERS FOR WATER QUALITY STABILIZATION	VATER QU	ALITY STAI	3ILIZATION
WATER LEV	WATER LEVEL (ft btoc) AT TIME OF SAMPLING;	Œ OF SAMI	1	57.73	FILTER LOT #	LOT #	7109	120 H 039		Temperature ±1 C(1.8 F) pH ±0.1	1.8 F)	Conductivity ± 5% Turbidity 5 NTUs	5 NTUs

Form number Tt-O-049 (9/05)

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page _____of _____

Fe+2 (ppm) WATER LEV Comments:	1600						1540	1534	1533	1531	(42)	1451	5651	1485	Time	PUMP & TUBING (V) (L)	WATER COLUMN (feet)	STATIC WAT	SAMPLE I.D.	MONITORIN	PROGRAM NAME	DATE
Fe+2 (ppm) Taken immediately be WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments:	Vacated well					ć	Somple	The Park		3			Begin Purge	Arrived at well	Activity	SING (V) (L) /6.	نخر	STATIC WATER LEVEL (ft broc) 37	SAMPLEID VOLLEGION TO SPINISH TO COLLEGION TIME V9961	= 1	マイスク	3/7/06
Taken immediately before sampling ME OF SAMPLING: 37,9									37.97	37.97	37.97	37.96			Water Level (ft btoc)	5/53)+1		7.50	DI IPI ICATE I D. /	でで	יו מדי	SITE
ore sampling.									(8.44	18.49	18.49 1209	18,2011			Temp (Deg. C))+/00/- (TUBING DIAMETER (in)	AI WELL DER	COLLECTION	IRIP BLANK I.D.		SITE NUMBER
FILTER						7			996/44.8	8.49 12506.19	.	11/3			EC (µmhos/cm)	1	ER (in)	THE LEAD	199 July 199	1 2 C	1247	かって
FILTER LOT #					-				6/6	4 519	5)69	6,8			pH Ti	5V(L) 2.	1,41	0	154W	7101	20	
Alos									3.46 7	.69.	708	199			Turbidity (NTU)	.53		W.	1/630			
A105 31342									78.7	7.70	8.06	86.8			Dissolved Oxygen (mg/L)	CARTA CLAN	SAMPI HDIS	į		SAMPLING DEVICE	PURGING DEVICE	;
الوا									8.6	1.1	0.	4.0-			ORP (mV)	OTHER PERSON STORAL ONE	SIGNIATION	TO ME DISCONTIN	PID READING IN CASING (ppm)	DEVICE	EVICE]
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C (1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs									Cler	Cler	Clear	C/2-			Color	741/1	The state of the s		i (ppm) (initial)		MICKO	NATION O
\$ FOR WATER QUA ±1 C (1.8 F) ±0.1									7.406	(.80	ر ا ا ا	5			Volume Purged (L)	R	N N		0 0	MICROPURGE DEDICATED PUMP	MICKOPORGE DEDICALED POMP	7777
ALITY STABILIZAT Conductivity ±5% Turbidity 5 NTUs									CK H	W	ည -	//			Pump & Tubing Volumes Purged		\\ \\) (verified to)	(vented to)	ATED PUMP	ALEDPUMP	
BILIZATION y ±5% 5 NTUs	\IRP_Dr	ive\Field	Work\Fi	eld_Coo	ordinatio	on\Form	s\Tto04	12,Field	Data_I	og Sh	eet_MP.a	- 6	S N		Flow Rate (LPM)		7			> シ		

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page ____ of ___

Fe+2 (ppm) . WATER LEVI Comments:	1405		1350	1341	1340	1336	1332	1328	1324	1320	/3/6	1300	Time	WELL VOLUME (V) (gals)	WATER COLUMN (feet)	STATIC WATER	SAMPLE I.D.	MONITORING	PROGRAM NAME	DATE
Fe+2 (ppm) Taken from first bails WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments:	Vacated well		Sample	END PURGE							Begin Purge	Arrived at well	Activity			STATIC WATER LEVEL (ft btoc)	Val PMW4	MONITORING WELL IDENTIFICATION	ME BGZ	03/07
laken from f IE OF SAM			17.08	GE .	18.00	16.30	13.92	12.31	10.88	10.21			Water Level (ft btoc)	2.16	8 %	58.6		NOI.	dr	
irst bailer i			1		٠	_				_	21.5		Pump Depth (ft btoc)	3 V (gals)	CASI	TOTA	CATE I.D. /	4	TRIP	SITE NUMBER
mmediately befor			18.1		18.46	18.31	17.89	1771	17.82	17.40			Temp (Deg. C)	lι	CASING DIAMETER (in)	TOTAL WELL DEPTH (fi btoc)	DUPLICATE I.D. / COLLECTION TIME	74-6WM-4	TRIP BLANK I.D.	JMBER
6			834		853	847	822	218	816	8/7			EC (µmhos/cm)	6-48 B	R (in)	H (ft btoc)	TIME	4	pev	Y
sampling. FILTER LOT # .			6.51		6.33	6.31	6.30	823	629	6.35			pН	BAILER BOX #	7	20.6	1		112181 pcv	
A 105			44.8		789	10.6	671	3.26	2.91	2.46			Turbidity (NTU)	# 204	•	فر	1		11	
410532744			4.23		2.98	3.42	1.84	1-47	1.73	3.99			Dissolved Oxygen (mg/L)		SAMPLER'S		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
			8. 552		/82.7	187.8	19%.8	208.0	2286	271.8			ORP (mV)		SAMPLER'S SIGNATURE		G IN BREATHIN	PID READING IN CASING (pp	DEVICE	SVICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C (1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs			clear		Clear	clear	Clear	clear	clear	clear			Color	M. Ju	des	,	3 ZONE (ppm)	pm) (initial)	DISPOS/	2" SUBM
WATER QU (1.8 F)			1		12.00	10.00	6.00	6-00	4.00	2.30			Volume Purged (gals)	1	Both)	h	1.6	DISPOSABLE TEFLON BAILER	ERSIBLE GRI
ALITY STABILIZAT Conductivity ± 5% Turbidity 5 NTUs			١		2.00 5.55	462	8.00 3.70		1.85	0.93			Well Volumes Purged		1	1	(vented to)	(vented to)	BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
BILIZATION BY ± 5% S NTUs	X:\IRP_I	Drive\Field_Work\Fie	eld_Coordin	ation\F	orms\Tte	5050,Fie	ld_Data	i_Log S	heet Gr	undfos.	0.50		Flow Rate (GPM)				0.0	2.		

	U	5	Ì	1	
6/	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page ____ of ____

DATE	2/10/06	SITE	SITE NUMBER	14			PURGING DEVICE	DEVICE	MICROPU	RGE DEDIC	MICROPURGE DEDICATED PUMP	
PROGRAM NAME	NAME BGMP	TRJ	TRIP BLANK I.D.	124781215	12/5		SAMPLING DEVICE	DEVICE	MICROPU	RGE DEDIC	MICROPURGE DEDICATED PUMP	
MONITORIN	MONITORING WELL IDENTIFICATION .	24- Mr	MW-48		1		ת אשמ תום	שוכי שיו כי פושוני		0.1	(0
SAMPLE I.D	SAMPLEID. 124hw48M	_ DUPLICATE I.D. / COLLECTION TIME	COLLECTION	TIME	1	·	PID READ	PID READING IN BREATHING Z	PID READING IN BREATHING ZONE (ppm) (initial) —	0.0	(vented to)	
STATIC WAT	STATIC WATER LEVEL (ft broc) 65.42		TOTAL WELL DEPTH (ft btoc)	TH (ft btoc)	88.0	0			:			
WATER COLUMN (feet)	UMN (feet)22.6		TUBING DIAMETER (in)	ER (in)	1/4		SAMPLER	SAMPLER'S SIGNATURE	MAL	<i>\$</i>)
PUMP & TUBING (V) (L)	BING (V) (L) 0.25	S			5 V (L)	1.25					9	
Time	Activity	Water Level (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	pН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (L)	Pump & Tubing Volumes Purged	Flow Rate (LPM)
0930	Arrived at well											
1000	Begin Purge											0.24
1002		65.50	17.06	2099	19.5	69.6	5.56	69.0	Slightly cloudy	0.48	1.92	- 1
1004		65.50	17.38	2126	562	43.5	1.50	56.7	slightly cloudy	0.96	3.84	legi XII
1006)	65.50	17.41	2187	5.53	40.4	0.96	52.2	Slightly cloudy	ph.7	5.76	←
000 V	End Furge											
1010	Sample											042 Fig.
												on\Forma\Ti
												Coordin
												_Work\Field
												Orive\Fig
1030	Vacated well											VIRP 1
Fe+2 (ppm)	Taken i	Taken immediately before sampling	ore sampling.						PARAMETERS FOR WATER QUALITY STABILIZATION	ATER OU	ALITY STAB	
WATER LEV	WATER LEVEL (ft bloc) AT TIME OF SAMPLING: 65.50	SAMPLING: -	65.50		LOT #	FILTER LOT # 110425464	5464		Temperature ±1 C(1.8 F)	8 F)	Conductivity ±5%	1 ± 5%
Comments:	MS/ MSD							-	рН ±0.1		Turbidity 5 NTUs	5 NTUs

Page I of __

DATE 3/	3/7/06		SITE NUMBER	JMBER	24			PURGING DEVICE	MICE	2" SUBME	RSIBLE GRU	2" SUBMERSIBLE GRUNDFOS PUMP	.0
PROGRAM NAME	BGMP	*	TRUP	TRIP BLANK I.D.	V 23	24 18 1211		SAMPLING DEVICE	EVICE	DISPOSAE	DISPOSABLE TEFLON BAILER	BAILER	
MONITORING W	MONITORING WELL IDENTIFICATION		24 - PA	PMW -S				PID READIN	PID READING IN CASING (ppm)		2.2	(vented to)	·-
SAMPLEID. Y24PMWS	24PMWS	•	CATE I.D. /	DUPLICATE I.D. / COLLECTION TIME	TIME	/-	1	PID READIN	G IN BREATHIN	ONE (ppm)	0.	(vented to)	
STATIC WATER LEVEL (ft btoc)	1	6.95	TOTA	TOTAL WELL DEPTH (ft btoc)	'H (ft btoc)	70.4	1]	\	J	
WATER COLUMN (feet)	-	3.5	CASI	CASING DIAMETER (in)	R (in)	2		SAMPLER'S SIGNATIRE	RICNATIRE	Joge	が下へ	é	
WELL VOLUME (V) (gals)	(s)	2.15	3 V (gals)	gals) 6.46		BAILER BOX#	# 204	Of title state of		M.N	17		
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µnıhos/cın)	pН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
0952 A	Arrived at well												
0955 B	Begin Purge		19.5										o. S 0
1000		10.60		16.50	725	6.63	4.51	3.18	82.4	clear	2.50	9.85	_
1005		11.30		17.09	705	6.5%	6.39	1.92	73.6	clear	5.00	2.33	heet_Gr
1010		12.92		17.40	707	6.57	9.18	1.77	61.3	clear	7.50	3.49	
1015		14.31		17.69	749	6.47	9.04	1.67	72.9	clear	10.00	4.65	
1020		15.30	←	17.83	740	14.3	10.2	1.41	74.8	clear	05.51	185	•
120/	End Purge	}											
-	Sample	13.39	1	17.54	454	47.3	87.8	3.15	152.4	doudy		1	1
												,	
7055	Vacated well												
Fe+2 (ppm)	Ti Ti	aken from fi	rst bailer i	Taken from first bailer immediately before sampling	efore samplin	ıg.				PARAMETERS FOR WATER QUALITY STABILIZATION	ATER OU	ALITY STAI	
WATER LEVE	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	E OF SAMI	LING: _	13.37	FILTER	FILTER LOT #	A10532744	744		Temperature ±1 C (1.8 F) pH ± 0.1	.8 F)	Conductivity ± 5% Turbidity 5 NTUs	ity ±5%
(omments:													



Page ____ of ____

Comments:	WATER LE	Fe+2 (ppm)	15/5					1450	1104	1/02	1100	Time	WELL VOLU	WATER COLUMN (feet)	STATIC WAT	SAMPLE I.D.	MONITORIN	PROGRAM NAME	DATE
Minimal water to	VEL (ft btoc) AT TI	1	Vacated well					SAMPLE	End Purge	Begin Purge	Arrived at well	Activity	WELL VOLUME (V) (gals)	UMN (feet) 2.3	STATIC WATER LEVEL (ft btoc) 38, 13	SAMPLEID. YZYMNSA	MONITORING WELL IDENTIFICATION	NAME BEMP	3/7/06
water	E OF SAM	aken from							ı			Water Level (ft btoc)	1.48		8,13	TAND	Θ <u>ν</u>		
4	IPLING: _	first bailer i							- Well Dry	40.0		Pump Depth (ft btoc)	3 V (CAS	TOTA	JCATE I.D. /	24-1	TRIP	- SITE N
Sample	38.46	mmediately										Temp (Deg. C)	3 V (gals) 4.	CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	24-MW-SA	TRIP BLANK I.D.	SITE NUMBER
to sample so only one diesel collected	FILTER LOT #	Taken from first bailer immediately before sampling										EC (µmhos/cm)	4.43 BAI	ER (in)	TH (ft btoc)	N TIME	A	V24TB12]	24
9	LOT #	io.										pH	(LER BO	4	40.4	/		[2]	
re oliese	105											Turbidity (NTU)	BAILER BOX # 204		4	1			
d coiled	105327H											Dissolved Oxygen (mg/L)		SAMPLER'S SIGNATURE		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
												ORP (mV)		SIGNATURE		G IN BREATHIN	PID READING IN CASINC (ppm)	EVICE	VICE
	Temperature ± 1 C (1.8 F)	PARAMETERS FOR WATER OHALITY STABII IZATION										Color	M. 1/4	Jorgan		ONE (ppm)	ppm) (initial) .	DISPOSA	2" SUBM
	(1.8 F)	WATER OF							1.00			Volume Purged (gals)		5)	0.0	0.9	DISPOSABLE TEFLON BAILER	ERSIBLE GR
Imounty	Conductivity ± 5%	'AI ITY STAF							8900			Well Volumes Purged				(vented to)	(vented to)	N BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
0.141.03	ty ±5%				Coordina				1	0.58		Flow Rate (GPM)				0.0	0.0		P

Page _____of ___

Comments:	WATER LE	Fe+2 (ppm)	1230		1220	1210	1209	1204	1203	1200	1156	//55	1/51	1146	1141	1119	Time	WELL VOLU	WATER COLUMN (feet)	STATIC WAT	SAMPLE I.D.	MONITORIN	PROGRAM NAME	DATE
Stop 12	VEL	-	Vacated well		Samp le	Ship Con			3	Stop Du		Raise p			Begin Purge	Arrived at well	Activity	WELL VOLUME(V) (gals)	UMN (feet)	STATIC WATER LEVEL (ft btoc)	YZYMWSB	MONITORING WELL IDENTIFICATION	NAME BEMP	317106
purse	ME OF SAM	Taken from t			65.21	Purge	68.03	67.42	PWSC	Durging	68.08	Dump	68.00	67.92			Water Level (ft btoc)	13.10	20.2	65.15			5	5
due	PLING: _	iret hailer i			١	1	←	75.0	1		4	75.0	4		\$5.0		Pump Depth (ft btoc)	3 V (gals)	CAS	TOT/	ICATE I.D. /	24 - m	TRIP	_ SITE N
Je of	65.21	mmediately			18.64		20.21	20.18			20.34	1	20.30	20.27			Temp (Deg. C)	gals) 	CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	mw-88	TRIP BLANK I.D.	SITE NUMBER
generatu	AE OF SAMPLING: 65.2 FILTER L	hafora campl			822		hs8	458			887		956	\$56			EC (µmhos/cm)	3	ER (in)	TH (ft btoc)	TIME	:	V24 TB121	24
me	FILTER LOT #				6.34		19.8	5.62			5.63		24.8	5.69) pH	AILER BO	4	85.3	1		81211	
malfunction.	A105				246		1.81	2.35			3.21		2.70	19.5			Turbidity (NTU)	BAILER BOX # 204		ώ	1			
	A1053 2744				3.63		51.0	0.21			12.0		0.27	0.70			Dissolved Oxygen (mg/L)	SAIMILENS	SAMPI EDIS		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
				-	299.1		195.5	192.1			192.9		0.68/	186.5			ORP (mV)	SAWE LER S SIGNALORE	SIGNATION		IG IN BREATHI	PID READING IN CASING (ppm)	DEVICE	EVICE
P14 0.1		7			clear		clear	clear			clear		clear	clear			Color	M	4		ONE (ppm)	ppm) (initial)	DISPOS	2" SUBN
	\$ FOR WATER QU. ±1 C(1.8 F) +0.1				ı		50.0	40.0		# 2	30.0		20.0	10.0			Volume Purged (gals)	2	オママ		0.2	2.9	DISPOSABLE TEFLON BAILER	TERSIBLE GRU
Turbury	ALITY STABILIZAT Conductivity ± 5%				1		3.82	8.05			2.29		1.53	0.76			Well Volumes Purged		ţ,		(vented to)	(vented to)	BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
OTATOS	SILIZATION ty ±5%	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	GNRP_D	Prive\Fie	Id_Wor	k\Field_	Coordin	2.00	orms\Ti	10050,Fi	eld_Dat	a_Log_S	Sheet_G	rundfos.	2.00 ai mh		Flow Rate (GPM)				0.0	7.0		P

TEIRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page ____ of ___

DATE	1101106	_ SITE NUMBER	MBER	七の			PURGING DEVICE	VICE .	2" SUBMEI	RSIBLE GRU	2" SUBMERSIBLE GRUNDFOS PUMP	•
PROGRAM NAME	BGMP	TRUP E	TRIP BLANK I.D	1	,		SAMPLING DEVICE	EVICE	DISPOSAB	DISPOSABLE TEFLON BAILER	BAILER	
MONITORING WELL IDENTIFICATION	FICATION	b	9-MW-tr	6			PID READING	PID READING IN CASING (ppm)		8.6	(vented to)	0.0
SAMPLE I.D.		CATE I.D. / C	DUPLICATE I.D. / COLLECTION TIME	TIME	1	1	PID READING	IN BREATHIN	ONE (ppm)	0.0	(vented to)	0.0
STATIC WATER LEVEL (ft btoc) W 14.76 ONY TOTAL WELL DEPTH (ft btoc)	. W. + + + (W)	NTOTAL SATOTAL	, WELL DEPT	H (ft btoc)	65.	0			;			
WATER COLUMN (feet)	0.2	CASIN	CASING DIAMETER (in)	R (in)			SAMPLER'S SIGNATURE	IGNATURE .	- Jagge	ba.	6	
WELL VOLUME(V) (gals)	C	3 V (gals)	als)	BAI	BAILER BOX#	#1		١.	M. M	~		
Time Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
/4/5 Arrived at well	well ——											
- Begin Purge												1 mh
1417 Nell DRY	ber -	\geq	6 3	Sample								undfos.ā
												_Log_Sheet_G
												eld Data
												(to050.F
										İ		ion\Forms
												Coording
												ork\Field
												Field Wo
ι ψί Ο Vacated well	rell				1							CVIRP Drive
Fe+2 (ppm)	Taken from fi	rst bailer in	ımediately b	Taken from first bailer immediately before sampling	áa l			1	PARAMETERS FOR WATER QUALITY STABILIZATION	ATER QUA	LITY STAB	ILIZATION
WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	TIME OF SAMI	PLING: _	Į.	FILTER LOT #	LOT#.		1		Temperature ±1 C (1.8 F) pH ±0.1	.8 F)	Conductivity ± 5% Turbidity 5 NTUs	y ±5% 5 NTUs
Comments:												

	U	[İ		
7 7 7	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page ____ of ____

1100 Va					loss We		lous Arriv	Time Ac	WATER COLUMN (feet) WELL VOLUME (V) (gals)	岩	SAMPLEID.	MONITORING WELL IDENTIFICATION	PROGRAM NAME	DATE
Vacated well				٠	Well day;	Begin Purge	Arrived at well	Activity		EL (ft btoc	THE PROPERTY	LIDENTIFICATIO	BLAP	11100
					3			Water Level (ft btoc)	040	14. 4. C	•	ž 		
				,	Show K	(Pump Depth (ft btoc)	CASING I	LATOT PA	CATE I.D. / C	74.7	TRUP E	 SITE NUMBER
					co/KCH&			Temp (Deg. C)	MAIC	, WELL DEP	DUPLICATE I.D. / COLLECTION TIME	24.MW-7	TRIP BLANK I.D.	MBER
					1			EC (µmhos/cm)					11EL BLARA	47
This from first boiler immediately before compliant						1		pН	LER BOX	\$	1		141	
								Turbidity (NTU)	BAILER BOX # 184 (M)	64.B		ŗ		
								Dissolved Oxygen (mg/L)	SAMPLER'S SIGNATURE		PID READING	PID READING	SAMPLING DEVICE	PURGING DEVICE
								ORP (mV)	SIGNATURE		IN BREATHING	PID READING IN CASING (ppm)	EVICE	VICE
								Color	D you		ONE (ppm)	pm) (initial)	DISPOS	2" SUBI
								Volume Purged (gals)	N. A.	<u>></u>	0.0		DISPOSABLE TEFLON BAILER	MERSIBLE GR
								Well Volumes Purged			(vented to)	(vented to)	N BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
						,		Flow Rate (GPM)			0.0			P

Page _____ of ____

	Comments:	WATER LE	Fe+2 (ppm)	1345				1325	1113	1112	1107	1102	1057	1052	IO47	Time	WELL VOLU	WATER COLUMN (feet)	STATIC WAT	SAMPLE I.D.	MONITORIN	PROGRAM NAME	DATE ——
molosses	1055 - Pable On-Site	VEL (ft btoc) AT TI		Vacated well				SAMPLE	WELL	11/1/20				Begin Purge	Arrived at well	Activity	WELL VOLUME(V) (gals)		STATIC WATER LEVEL (ft btoc)	V24PMW8	MONITORING WELL IDENTIFICATION		8 MARCH 2006
inject	able (Œ OF SAM	laken from					19.53	PURGE	21.0	18.83	17.8	57.Fi			Water Level (ft btoc)	6.3	٦	11.80			BGMP	9 802
ion is	Jn-5: H	IPLING:	first bailer i					1	6ED	_				21.0		Pump Depth (ft btoc)	3 V (CAS		JCATE I.D. /	24 - PI	TRUP	_ SITE N
Sulting	P	19.53	immediately					18.61	DRY	19.62	19.36	19.17	18.32			Temp (Deg. C)	3 V (gals)	CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	PMW- 8	TRIP BLANK I.D.	SITE NUMBER
in lou	cluster	FILTER LOT #	Taken from first bailer immediately before sampling				ı	5258		3726	3673	3545	3288			EC (μmhos/cm)	18.9 BA	ER (in)		N TIME		V24.	24
24	ص	LOT#	ig.	1				3.87		3.85	3.86	3.87	3.88		1	рН	BAILER BOX # 205	T	21.5	1-		V24 TB1212	
(nigh as	ells in	A.						+ 200		1	2.5	19.6	4.51			Turbidity (NTU)	£05					2	
injection resulting in low pH (nighacidity), color, a	This cluster of wells influenced by	4204190S4	•					2.04		0.25	0.31	0.43	90.69			Dissolved Oxygen (mg/L)		SAMPLER'S SIGNATURE		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
olor,	by							58. ₄		46.3	44.3	46.7	60.2			ORP (mV)		SIGNATURE		G IN BREATHIN	PID READING IN CASING (ppm)	DEVICE	EVICE
and odor.	pH ±0.1	Temperature ±1 C(1.8 F)	PARAMETERS FOR WATER OHIALITY STABILIZATION					cloudy brown		cloudy brown 10-0	cloudy brown	cloudy brown	cloudy brown			Color	W	\\ \frac{1}{2})	ONE (ppm)	pm) (initial) _	DISPOSA	2" SUBME
		.8 F)	ATER OII					1		10 - 0	7.5	5.0	2.5			Volume Purged (gals)		X	١	0.0	4.0	DISPOSABLE TEFLON BAILER	RSIBLE GR
	Turbidity	Conductivity ±5%	ALITY STAI							1.60	1.20	0.80	0.40			Well Volumes Purged				ŀ	(vented to)	V BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
	5 NTUs	ty ±5%	RII IZATION	GAIRP_Dr	ive\Field_Won	k\Field_Coo	rdination\F	orms\Tto	050,Fie	eld_Date	a_Log_S	Sheet_G	rundfos.	0.50 ai mh		Flow Rate (GPM)				0.0	0.0		fP □

Form	
number	
Tt-O-050	
0 (9/05)	

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

Page
-
알
-

DATE	18/06		SITE NUMBER	JMBER	24			PURGING DEVICE	VICE	2" SUBME	RSIBLE GRU	2" SUBMERSIBLE GRUNDFOS PUMP	P
PROGRAM N	PROGRAM NAME 36		TRUP	TRIP BLANK I.D.	V24-	131212	212	SAMPLING DEVICE	DEVICE	DISPOSA	DISPOSABLE TEFLON BAILER	BAILER	
MONITORIN	MONITORING WELL IDENTIFICATION	ž	24-	24-MW-8A	\$ A			PID READIN	PID READING IN CASING (ppm)		7.5	(vented to)	<i>0.</i> c
SAMPLE I.D.	SAMPLE I.D. V24 MW&A DUPLICATE I.D. / COLLECTION TIME	Z DUPLI	CATE I.D. /	COLLECTION	TIME	-/-		PID READIN	G IN BREATHIN	ONE (ppm) (initial) —	0.0	(vented to)	
STATIC WATE	STATIC WATER LEVEL (ft btoc) 24.85	4.85	TOTA	TOTAL WELL DEPTH (ft btoc)	toc)	38,	6				U		
WATER COLUMN (feet)	JMN (feet) 4. 3	5 £	CASI	CASING DIAMETER (in)	R (in)	6		SAMPLER'S SIGNATURE	SIGNATURE (۱		
WELL VOLU	1/2	69	3 V (gals)	gals) 7.06		AILER BOX	BAILER BOX # 205			ST.X	X	X	
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	рН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Соют	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
1660	Arrived at well												
10(0	Begin Purge		24			}							5.0
१०१८		32.00	-	16.65	715	45.3	16.5	7.5%	280,1	chan	2.5	243	-
1020		22,54		18.98	786	6.0	10,7	687	(81.9	(lea-	0.5	0. YK	
1075		3):8	_	19.69	244	6.10	10603	200	Po.s-	Clean	7.5	1.32	
6030		36.83		70.43	750	33.5	5.96	6.65	27.0	- (L+	10.0	1.75	
1035	-	13:12	7	76. of	136	73.5	もり	229	1.28	(lee-	125	270	L
1036	E	1	7	wec	つびろ								I
1355	1			1200	40%	135	stt	28.2	357.2				
													Work\Field_
													:
1400	Vacated well												
Fe+2 (ppm)	TEI (ft brock) AT TIM	laken from f	irst bailer in	nmediately b	Taken from first bailer immediately before sampling	ng.	Alodiense	4059		PARAMETERS FOR WATER QUALITY STABILIZATION [Temperature +1 C (1 8 F) Conductivity +5%	VATER QU	ALITY STABILIZAT	BILIZATION
Comments:	Comments:	TATES TO THE		70.7	rilligr	FILIER EOI # .		,		pH ±0.1	,	Turbidity	5 NTUs

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

Page
_
<u></u>

Fe+2 (ppm) WATER LEV Comments:	315		13(0	th21	1245	1240	(735	(120	1215	220	1215	(700	Time	WELL VOLU	WATER COLUMN (feet)	STATIC WAT	SAMPLE I.D.	MONITORIN	PROGRAM NAME	DATE
Fe+2 (ppm) Taken from first baile WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments:	Vacated well		Sand	ind	\ -						Begin Purge	Arrived at well	Activity	WELL VOLUME(V) (gals) 24.1	UMN (feet) 77	STATIC WATER LEVEL (ft btoc)	SAMPLE I.D. V24/MW8B DUPLICATE I.D. / COLLECTION TIME	MONITORING WELL IDENTIFICATION	JAME BGM	18/06
Taken from f			P.		<i>\$</i> 0,€	t1.79	62.62	Ets	529	14.8g			Water Level (ft btoc)		-	33.96	TANG SUPL		P	
irst bailer i		į		خ	5	-	-			_	1		Pump Depth (ft btoc)	3 V (CAS		ICATE I.D. /	/- ht	TRUP	SITE N
numediately befu			14.52	1/2	20.50	70.48	20.39	20.25	t).05	19.79			Temp (Deg. C)	3 V (gals) 72,	CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION	93-67-55	TRIP BLANK I.D.	SITE NUMBER
l ' ore			127		なな	974	355	255	5XE	196			EC (µmhos/cm)	1)R (in)	TH (ft btoc)	TIME	83	27tu	7
sampling. FILTER LOT #_			5.24	13	6.24	6.36	6.36	4.3	63(427			рН	BAILER BOX # 205	K	7.7	1		1212	
4108			15:01		7.55	12,7	(0,3	14.6	79.3	66.1			Turbidity (NTU)	#205					7	
14245014			8.80	\$	4.3	6.19	46.9	5.88	14.5	5.83			Dissolved Oxygen (mg/L)		SAMPLER'S SIGNATURE		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
			706,2		17	(27.7	161.5	1.00.	168.2	1.83)			ORP (mV)		signature 🕇		G IN BREATHIN	PID READING IN CASING (npm)	DEVICE	VICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C(1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs					Chean	Con	Clean	(ear	clear	Cloudy			Color	The state of the s		7	ONE (ppm)		DISPOSA	2" SUBM
VATER QU					US-0	37.5	30.0	225	0.51	5.t			Volume Purged (gals)	X			0,0	4,0	DISPOSABLE TEFLON BAILER	ERSIBLE GR
JALITY STABILIZAT Conductivity ± 5% Turbidity 5 NTUs					•		1.75		230	0.31			Well Volumes Purged	/b/~	9		(vented to)	(vented to)	N BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
BILIZATION 5 ± 5% 5 NTUs	X:\IRP_E	Prive\Field_Won	k\Field_Coord	lination\	Forms\Tto	5050,Fie	ld Data	Log S	heet Gr		, ,		Flow Rate (GPM)				þ) a		ъ

Page ____ of ____

Comments:	WATER LEV	Fe+2 (ppm)	IVOO				101355		1035	1030	1025	1015	Time	WELL VOLUME (V) (gals)	WATER COLUMN (feet)	STATIC WATE	SAMPLE I.D.	MONITORING	PROGRAM NAME	DATE -
* 6011	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:		Vacated well				SAMPLE	~	5 m 10/40		Begin Purge	Arrived at well	Activity	VIE (V) (gals)		STATIC WATER LEVEL (ft btoc)	V24 PMW 82	MONITORING WELL IDENTIFICATION	AME BGMP	C 1000 C 27
EN OI	Æ OF SAM	Taken from f					t 8 15.45	PURGE	20.13	16.89			Water Level (ft btoc)	1.84	18.01	12.09	ı		0	
or all	PLING: _	īrst bailer ir						4		ā	22.5		Pump Depth (ft btoc)	3 V (gals)	CASII	LATOT	CATE I.D. / O	14 · 64	TRUP I	- SILE NUMBER
nd ord	15-45	nmediately					18.51	DR4 -	19.61	17.99			Temp (Deg. C)		CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	24. PMW - 8-2	TRIP BLANK I.D.	WIBER
KOTTEN ODOR and orange color to	FILTER LOT #	Taken from first bailer immediately before sampling					08Sh		3409	3081			EC (µmhos/cm)	5.5 BA	R (in)	TH (ft btoc)	TIME	7	N24181212	
or to	LOT #	16:					S.14		5.06	S.20			рН	BAILER BOX #	4	22.	1		21219	
							1.81		भ भ	34.7			Turbidity (NTU)	# 20S					•	
groundwater							2.25		0.68	-49			Dissolved Oxygen (mg/L)		SAMPLER'S SIGNATURE		PID READIN	PID READIN	SAMPLING DEVICE	PUKGING DEVICE
							0.6		P.52-	-40.9			ORP (mV)		SIGNATURE		PID READING IN BREATHING	PID READING IN CASING (ppm)	EVICE	SVICE
	Temperature ± 1 C(1.8 F) pH + 0.1	20 1				9	cloudy crange		cloudy orange	cloudy orange			Color	A A		·	NG ZONE (ppm) (initial) -	opm) (initial) _	DISPOSA	1 00 0 min
	1.8 F)	VATER QU					1		5.0	2.5	-		Volume Purged (gals)		$\langle \rangle$		0.0	0.0	DISPOSABLE TEFLON BAILER	No Per ON
3 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	Conductivity Turbidity 5	ALITY STAI							2.72	1.36			Well Volumes Purged		$\left \begin{array}{c} 1 \end{array} \right $		(vented to)	(vented to)	N BAILER	2 30BMENSIBEE GRONDING FOME
	5 NTUS	BILIZATION								_	8.0		Flow Rate (GPM)				0.0	0.0		

Form number Tt-O-050 (9/05)

TEIRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefaxy (805) 681-3108

1 980	D
١	
ŀ	.,

1325			076)	3 (6)	lost	1055	०५१	OHO	Time	WELL VOLU	WATER COLI	STATIC WAT	SAMPLE I.D.	MONITORIN	PROGRAM N	DATE
Vacated well							Begin Purge	Arrived at well	Activity		UMN (feet)	ER LEVEL (file)	RUMPEN	LL IDEI	-	7/8/106
			Į	hung	3633	73.9V			Water Level (ft btoc)	\mathcal{Z}	50	31.50	A DUPL	ION	40	
			1	1	C		38		Pump Depth (ft btoc)	3 V (1	ICATE I.D. / (24	TRIP	SITE NUMBER
			19, 02	200	18-01	brt			Temp (Deg. C)	gals) 3.	NG DIAMETE	L WELL DEPT	COLLECTION	140	BLANK I.D	JMBER
],	1	888	326			EC (µmhos/cm)	`	R (in)	<u>ි</u> 	TIME	1-84-	220	24
			6.62			6.10			pН	VILER BOX	4	39.0	1	7	122	
					16.5-	1.89			Turbidity (NTU)	205			1		22	
			70.0	•	8.8.9	6.94			Dissolved Oxygen (mg/L)	1 1	SAMPLER'S S		PID READING	PID READING	SAMPLING D	PURGING DEVICE
			23.5	3	1429	1.01			ORP (mV)		SIGNATURE		3 IN BREATHIN	IN CASING (pr	EVICE	VICE
					clean	Clean			Color	my		,	G ZONE (ppm) (initial)		DISPOS	2" SUBN
			\parallel		4.0	20			Volume Purged (gals)	X			Ç. C	70	SABLE TEFLON	2" SUBMERSIBLE GRUNDFOS PUMP
					317	155			Well Volumes Purged	To the second			(vented to	(vented to	BAILER	JNDFOS PUM
					c		0.5-		Flow Rate (GPM)				<u>.</u> و- ر	0. o		ÍP
				Sangle 19. 02. 779 6.62 186 6.02 Vacated well		Fail hung - well dry — — — — — — — — — — — — — — — — — — —	Fand hung - well day - 18.0 68.1 88.6 Hag clan 4.0 3.17 Sangle - 19.0 779/6.62 186 6.02 781.3 - 19.0 3.17 Vacated well	Begin Purge — 38 — — — — — — — — — — — — — — — — —	Arrived at well — — — — — — — — — — — — — — — — — —	Activity Level Dissolved Water Pump Temp EC Dissolved ORP Dissolved ORP Dissolved ORP Color Punged Volumes Volume Volumes Oxygen CASING DIAMETER (in) E SAMPLER'S SIGNATURE Color Well Dissolved (ft boo) (Jumbos/em) PH Turbidity Color (mg/L) (mg/L) Color (gals) Purged (mV) Color (gals) Purged (gals) Purged (mV) Color (gals) Purged (gals		TOTAL WELL DEPTH (# twos) 254.0	24 - MU-FA - 2 PID READING IN Collection Time	TRIP BLANK ID. 12478 A. 2 24 - MU-FA - 2 CAMPLINO DEVICE DISPOSABLE TEFLON BALLER 70 FLO READING IN GRATTING ZONE (ppm) (mital) C34 (vened to) O. 10 TOTAL WELL DEFTH (ft base) 34.0 CASING DIAMETER (in) 2 SAMPLER SON # 245 Temp Depth Degit (ft base) 1.0 ft base (mg/L) (mg/L) Temp Depth Degit (mbos) (mg/L) (mg/L) (mg/L) CASING DIAMETER (in) 2 SAMPLER SIGNATURE OF Punged volumeas (mg/L) (mg/L) (color Punged volumeas (mg/L) (mg/L) (mg/L) (color Unique) (mg/L) - 14, 02 774 (6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 176 6.62 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5 6.82 186 6.41 16.5		

Page ____ of ____

	Comments:	WATER LEV	Fe+2 (ppm)	Siki				SOHI	1220	1219	1215	12/1	1207	242	Time	WATER COLUMN (feet) (gals)	STATIC WATE	SAMPLE I.D.	MONITORING	PROGRAM NAME	DATE
Pable Martinz back on six	Arcadis	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	1	Vacated well				 SAMPLE	ME LL P				Begin Purge	Arrived at well	Activity	0.0		18MIDHEA	MONITORING WELL IDENTIFICATION	ME BGMP	O WAKCH 2006
T'N'E	REM	Œ OF SAM	faken from t						PURGE	1	16.90	14.65			Water Level (ft btoc)	1.70	2 5. 65 2. 65	. '	1	0	200
back	Remodiation	PLING: _	first bailer i						D DAY	-		_	2		Pump Depth (ft btoc)	,	₹	ICATE I.D. /	24-01	TRUP	SITE NUMBER
	n Tech	19.30	Taken from first bailer immediately before sampling					18.92	7	19.50	18.67	17.32			Temp (Deg. C)	CASING DIAMETER (in) 3 V (gals) 5 · 1	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	P1W-8-	TRIP BLANK I.D.	JMBER
1210.	1	FILTER	efore sampli					6772		6032	6657	5580			EC (μmhos/cm)		Ή (ft btoc)			V 247	574
	onsite:	FILTER LOT #	1g.					3.42		3.46	.3.4°	3.49			рН	BAILER BOX#	21.6	799W632		V247B1212	
	1 200							+200		+ 280	+200	002 +			Turbidity (NTU)	20 \$	0	2/1700		7	
								0:42	3	0.39	0.65	50.5			Dissolved Oxygen (mg/L)	SAMPLER'S			PID READIN	SAMPLING DEVICE	PURGING DEVICE
								95.2		85.9	5.46	116.6			ORP (mV)	SAMPLER'S SIGNATURE		IG IN BREATHII	PID READING IN CASING (ppm)	DEVICE	EVICE
	l'n ∓ uď	Temperature ±1 C(1.8 F)	PARAMETERS FOR WATER QUALITY STABILIZATION					cloudybrown		cloudy brown	cloudy brown	cloudy brown			Color	me	<u>م</u>	PID READING IN BREATHING ZONE (ppm) (initial)	opm) (initial)	DISPOSAL	2" SUBME
		.8 F)	ATER QU]		6.0	4.0	6.0			Volume Purged (gals)		<i>;</i> \	0.0	0.0	DISPOSABLE TEFLON BAILER	RSIBLE GR
	l urbidity	Conductivity ± 5%	ALITY STAH							3, 53	2.40	1.20			Well Volumes Purged		•	(vented to)	(vented to)	NBAILER	2" SUBMERSIBLE GRUNDFOS PUMP
	SOING	ty ± 5%	3ILIZATION	V.(Joh	rive\Field_V	VortNG:	Con-li	050					0.5		Flow Rate (GPM)			0.0	0.0		P



Page
1
e,
1

DATE O MARCH 2006	SITE NUMBER	R 24		PURGING DEVICE	/ICE	2" SUBMER	2" SUBMERSIBLE GRUNDFOS PUMP	OFOS PUMP	
PROGRAM NAME 66MP	TRIP BLANK I.D.		V 24 T 6 12 12	SAMPLING DEVICE	VICE	DISPOSABI	DISPOSABLE TEFLON BAILER	VILER	
MONITORING WELL IDENTIFICATION	24 - PIW- 8-2	3-8-2		PID READING	PID READING IN CASING (ppm)		.3	(vented to)	0.0
SAMPLEID. VZ41,W82	DUPLICATE I.D. / COLLECTION TIME	ECTION TIME	1	PID READING	PID READING IN BREATHING	ONE (ppm)	0.0	(vented to)	0.0
STATIC WATER LEVEL (ft btoc)	11. 65 TOTAL WE	TOTAL WELL DEPTH (ft btoc)	22.3)			
	c. 7 CASING D	CASING DIAMETER (in)	2	SAMPLER'S SIGNATURE	GNATURE				
(s)	. b 3 V (gals)		BAILER BOX # 204			o me			
Time Activity Water Level	Pump Depth (ft btoc)	Temp EC (Deg. C) (μmhos/cm)	pH Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
240 Arrived at well —									
1248 Begin Purge —	_ 22 _								0.5
1253 /3.	3.91 1 18	0989 80.63	3.42 +200	1.34	1.40	eloudy brown	2.5	9.16	ındfos.a
1258 [1	17.25	19.07 7397	3.51 t200	14.0		cloudy brown	5.0	2.78	neet_Gr
1303 50 100 21	21.80	19.73 7481	3.50 + 200	0.27	77.6	cloudy brown	7.5 4	4.20	_Log_S
7	ROED DAY								d_Data
1415 SAMPLE -	19	19.59 7251	3-39 +200	1.66	72.7	cloudy brown			0050,Fie
									ation\Forms\Tt
									c\Field_Coordi
									rive\Field_Wo
1430 Vacated well —									C:\IRP_D
Fe+2 (ppm) Taken	r imı	liately before sampling	ý.		PA	RAME	TER QUAL	ITY STABII	IZATION
WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments:	1	19.95 FILTER LOT #	LOT #		Te	Temperature ±1 C (1.8 F) pH ±0.1		Conductivity ± 5% Turbidity 5 NTUs	± 5% NTUs

Form number Tt-O-050 (9/05)

		<u> </u>	f		$\Big]$
0/00/01	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page
Ĭ.
of -

WATER LEV Comments:	1155							1130	1120	1	1115	Time	WELL VO	WATER CO	STATIC W	SAMPLE I	MONITOR	PROGRAN	DATE
WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	ı	Vacated well					•	Sampl	End	Begin Purge	Arrived at well	Activity		WATER COLUMN (feet)	STATIC WATER LEVEL (ft bloc) 12.	SAMPLEID. VZ4PMW4	MONITORING WELL IDENTIFICATION	PROGRAM NAME 156 M	90 12014
AE OF SAM	,						1	1	Pun			Water Level (ft btoc)).29	7			TION	P	
PLING: _								7	*	ير		Pump Depth (ft btoc)	3 V (ı	CASI	TOTA	ICATE I.D. /	24-	TRUP	SITE NUMBER
nmediately t								19.11	1			Temp (Deg. C)	3 V (gals) O. 88	NG DIAMETI	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	24-PHW-9	TRIP BLANK I.D.	MBER
)efore								472	1)9			EC (µmhos/cm)	1 '	ER (in)	TH (ft btoc)	TIME	P	212187121	7.4
FILTER LOT # _								4.3	{		-) pH	BAILER BOX#	6	12	-		1219	
								24	{			Turbidity (NTU)	305					2	
								6.92				Dissolved Oxygen (mg/L)	1	SAMPLER'S SIGNATURE		PID READING	PID READNO	SAMPLING DEVICE	PURGING DEVICE
								243.5				ORP (mV)		SIGNATURE (3 IN BREATHING	PID READING IN CASING (Com)	EVICE	VICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C(1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs								(Jours)				Color	mat	1		ONE (ppm)		DISPOSA	2" SUBME
/ATER QU								1				Volume Purged (gals)	$\overset{\sim}{\sim}$			0.0	0	DISPOSABLE TEFLON BAILER	RSIBLE GR
ALITY STABILIZAT Conductivity ± 5% Turbidity 5 NTUs												Well Volumes Purged	3	d	_	(vented to) Q.	(vented to	N BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
BILIZATION ty ±5% 5 NTUs			eld_Work						1	2.5		Flow Rate (GPM)					0		Ŧ

4213 State Street, STE 100 Santa Barbara, CA 93110 Telephone (805) 681 3100 Telefax (955) 681 4108	LETRA TECH, INC.
---	------------------

Page
-
<u>e</u>
\

Fe+2 (ppm) . WATER LEV. Comments:	1423					1420	14/4	HIZ	11/1	1409	1407	1405	1343	Time	WATER COLUMN (feet) PUMP & TUBING (V) (I	STATIC WATE	SAMPLE I.D.	MONITORIN	PROGRAM NAME
WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	Vacated well					Sample	End Juste	_				Begin Purge	Arrived at well	Activity	WATER COLUMN (feet) $(7, 3)$ PUMP & TUBING (7) (L) $(7, 3)$	R LEVEL (ft btoc)	MEMNH EU	G WEI I IDENTIFICATION	36×0
Taken immediately before sampling AE OF SAMPLING: 22.2								21.70	21.44	21.20	20.84			Water Level (ft btoc)	12	0.84 TOT	DUPLICATE I.D. / COLLECTION TIME	ע	SITE N
ore sampling.								18.46	18.51	8.39	(7.99			Temp (Deg. C)	TUBING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION	LINIP BLANK I.D.	SITE NUMBER
ļ								573	576	813	288			EC (μmhos/cm)	17	btoc) _	TIME	9	177 107
FILTER LOT # _							1	86 96.9	8-76 459	6.24	6.17			Hq	5 V (L) 1	38.	1	. 24	HTRI
							_ \	<u>~</u>	8.2	25.0	21.7			Turbidity (NTU)	.36	~		(N)	2
								8.43	8.53	8.50	4 3			Dissolved Oxygen (mg/L)	SAMPLER"	•	- PID READI PID READI	- SAMPLING DEVICE	 PURGING DEVICE
								28	93	288	78			ORP (mV)	SAMPLER'S SIGNATURE		PID READING IN CASING (ppm) PID READING IN BREATHING 70	DEVICE	DEVICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C(1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs								Clear	C/ear	Clear-	(/6.7			Color	The second		PID READING IN CASING (ppm) (initial) . PID READING IN RREATHING ZONE (ppm) (initial)		MICROP
VATER QUA									043	2	0.4%			Volume Purged (L)	3		0 9	MICROPURGE DEDICATED PUMP	MICROPURGE DEDICATED PUMP
ALITY STABI Conductivity Turbidity 5								5.32	hh h	ي ب ايم	1.49		- mgcu		27		(vented to)	ATED PUMF	ATED PUMP
BILIZATION ity ±5% 5 NTUs	K:\[RP_Drive\]	rield_Work	\Field_Co	pordinatio	on\Forms	s\Tto0	42,Field	Data_	og_Sh	cet_MP.	- S	3))		Flow Rate (LPM)	1				

Form number Tt-O-049 (9/05)

	•	=	_	_	J	
2/7/00	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.	

C	Page
ŀ	of

Fe+2 (ppm) . WATER LEV Comments:	1451				1445	1441	140	1438	H36	木九	JH2S	Time	PUMP & TUBING (V) (L)	STATIC WATER LEVEL (f WATER COLUMN (feet)	SAMPLE I.D.	MONITORIN	PROGRAM NAME	
Fe+2 (ppm) Taken immediately by WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments:	Vacated well				Sample	Fled Purge	-			Begin Purge	Arrived at well	Activity	5	t btoc)	SAMPLE I.D. VAY MW98	MONITORING WELL IDENTIFICATION	IAME BGMP	7 / 7 / 7 / 7 / 7
							20.58	20.14	19.94			Water Level (ft btoc)	8.5(5.3) +	TOT	DUPLICATE I.D. / COLLECTION TIME.	74	SITE)	
ore sampling.							18.71	18.52	18.48			Temp (Deg. C)	= 901+	TOTAL WELL DEPTH (ft bloc)	COLLECTION T	()	SITE NUMBER	
FILTER LOT #							870	7	839 (EC (µmhos/cm)	1	H (ft btoc)	TIME -/-	9 <i>6</i>	161814PBV	7
# TO.							5.732.35	5.96 2.32	6.016.14			pH Turbidity (NTU)	5V(L) 2.05	4 6	7117		B1211	
							7.17	7.34	7.64			Dissolved Oxygen (mg/L)	' '	,	PID READI	BID BEADING DEVICE	PURGING DEVICE	
							19	7/1	1/5			ORP (mV)	SAMPLER'S SIGNATURE		PID READING IN BREATHING Z	DEVICE	DEVICE	
PARAMETERS FOR WATE Temperature ±1 C (1.8 F) pH ±0.1							761	<u>`</u>	Clear			Color	n Ken	F F	PID READING IN BREATHING ZONE (ppm) (initial).		MICROP	
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C (1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs							180 4.39	\mathcal{U}	060/4/		, mgcu	Volume Tubing Purged Volumes (L)			1 1	MICROPURGE DEDICATED PUMP	MICROPURGE DEDICATED PUMP	
ABILIZATION ity ±5%	\\\IRP_Drive\F	eld_Work\Field	Coordination	\Forms\Tto0	42,Field	\	_		-40	3		Flow Rate (LPM)				သ သ		

TETRA TECH, INC.
4213 State Street, STE 100
Samta Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page ______ of _______

DATE 3	87 06		SITE NUMBER	JMBER .	とと			PLIR GING DE	VICE	2" SUBME	RSIBLE GRU	2" SUBMERSIBLE GRUNDFOS PUMP	•
PROGRAM NAME	ME BEMP	\ 	TRUP	TRIP BLANK I.D.	1247	3	212	SAMPLING DEVICE	#OIV#	DISPOSA	DISPOSABLE TEFLON BAILER	RAILER	
MONITORING	MONITORING WELL IDENTIFICATION	N 24	١.	01-MWC	10			PID READING	PID READING IN CASINC (ppm)		0.0	(vented to)	0.0
SAMPLE I.D.	SAMPLE I.D. V24PHW10 DUPLICATE I.D. / COLLECTION TIME	O DUPLI	CATE I.D. / (COLLECTION	TIME	1		PID READING	G IN BREATHIN	ONE (ppm)	60	(vented to)	0.0
STATIC WATER	STATIC WATER LEVEL (ft btoc)	8.75	TOTA	TOTAL WELL DEPTH (ft btoc)	H (ft btoc)	9.3					•		
WATER COLUMN (feet)	10.	6	CASI	CASING DIAMETER (in)	R (in)	12		SAMPLER'S SIGNATURE	SIGNATURE	3/	1	1	
WELL VOLUME(V) (gals)	E(V) (gals)	77	3 V (gals)	gals) 5.3		ILER BOX	BAILER BOX # 205		. (KA A	2	7	\ \
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
0920	Arrived at well					-							
4830	Begin Purge		2										<i>C S</i>
6734		N2.70		18.1	305	2,4	8.77	((,(3)	20.4	clean	60	056	undfos.
250		1.8		13.60	2%	SN.E	1. us 21.2	10.39	214.8	Clean	2.0	7,72	heet_Gr
2630		13.14		15.51	575	7.00	7.0038.9	9.40	او(ره	Clean	30	1,69	
0940		41.18		2/2	£55	6.83	1	せたら	2581	clear	4.0	2.15	ld_Data
2230		15,45		ずど	388	6.83	43.5	44.7	1.86)	Clouds	3)	2. 52	0050,Fie
4450		12 48		16,72	22	63.50	55. G	5.5.3	8-1C	Clorida	6.0	3.40	orms\Tt
This	-	13.51	۴	1787	545	78.3	23.9	q.w.	(69.7	(londe.	40	39 %	ation\F
C 430	Engl	Com	r	(J)	りと	(-							Coordin
0110	Sample	10		17.84	620/	8.7	7.5	133	182.5				k\Rield_
	•				:								⊵\Field_Wor
2 12	Vacated well												\IRP_Driv
Fe+2 (ppm) _	TE TE	ıken from fi	rst bailer in	Taken from first bailer immediately before sampling	efore samplir	Jg.				PARAMETERS FOR WATER OUALITY STABILIZATION	VATER OUA	LITY STAB	ILIZATION
WATER LEVI	WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments:	E OF SAMI	PLING:	(5.52	FILTER LOT #	LOT#.	A6917059	र्वा		Temperature ±1 C(1.8 F) pH ±0.1	1.8 F)	Conductivity ± 5% Turbidity 5 NTUs	y ±5%
- The same of the													

١_

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page ____ of ___

					•			1	6779	CENT OF	CALL	5	
į	- H			5	CINOLO 400 0100)	0 9160	29405	Sover 1 2006	APPK.	1000	1		Comments:
5 NTUs	Turbidity 5	.8 F)	pH ±0.1		17 177	107	LOT #	FILTER LOT #	26.92	PLING:	E OF SAM	WAIER LEVEL (II BIGG) AL LIME OF SAMPLING:	VALEK LEV
ILIZATIO	LITY STAB	ATER QUA	굣	· ·	24 2 4	7	ģά	efore	nmediately b	irst bailer ir	aken from f		Fe+2 (ppm)
												Vacated well	1445
			Cloudy	-17.6	6.50	4200	7.30	1127	18:54			SAMPLE	927
					.				3	The King	2	Cat buy:	
8	3.00	6.0	(4-4)	84. H	7.31	4	PI.S	1088	15.3	•	*		<u> </u>
-	74.6	r.Y	Cloud	78.4	7.17	36.0	6.36	1062	הבי הני		34.00		3
	1.50	3.0	رلهما	14.4 H.	72	.H.	6.8	h£a	17.63		30.68		1150
-	20.0	=	Claudy	79.6	ור.ר	2.5	8.01	368	4.12	-	28.95		الجا
2.0										37		Begin Purge	Phil
												Arrived at well	\$
Flow Rate (GPM)	Well Volumes Purged	Volume Purged (gals)	Color	ORP (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	рН	EC (µmhos/cm)	Temp (Deg. C)	Pump Depth (ft btoc)	Water Level (ft btoc)	Activity	Time
			Mich Ph			# 104	BAILER BOX#		gals) 6.0	0 3 V (gals)	1	WELL VOLUME(V) (gals)	MELT AOTA
		30	In the	SIGNATURE	SAMPLER'S SIGNATURE		رو	R (in)	CASING DIAMETER (in)	CASI			WATER COLUMN (feet)
		•					₩ :-	H (ft btoc)	TOTAL WELL DEPTH (ft btoc)	TOTA	¥0.26	STATIC WATER LEVEL (ft btoc)	STATIC WATE
_ 	(vented to)	0.0	ZONE (ppm)	PID READING IN BREATHING	PID READIN		11	TIME	DUPLICATE I.D. / COLLECTION TIME	ICATE I.D. / (DUPL	VOI MA PEN	SAMPLE I.D.
0.0	(vented to)	0.0	ppm) (initial)	PID READING IN CASING (ppm)	PID READIN			A	24-MW-10A	4.	 	MONITORING WELL IDENTIFICATION	MONITORIN
	BAILER	DISPOSABLE TEFLON BAILER	DISPOSAI	EVICE	SAMPLING DEVICE		1	1 TEN BLAPA	TRIP BLANK I.D.	TRIP		AME BLMD	PROGRAM NAME
-0	2" SUBMERSIBLE GRUNDFOS PUMP	RSIBLE GRU	2" SUBME	EVICE	PURGING DEVICE			•	JMBER	SITE NUMBER		2017100	DATE

Fоrm	
number	
Tt-O-049	
(9/05)	

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Selephone (805) 681-3100
Telefax (805) 681-3108

	Page
7	_
	ဋ
,	$\overline{}$

≦ .	Fe+2 (ppm)	1 (50 Vac						5 of 11	1125 7	1124	1111	11.14	1109	1104 Be	(0 53 An	Time	PUMP & TUBING (V) (L)	WATER COLUMN (feet) 34, 6	STATIC WATER LEVE	SAMPLE I.D. VAY MW 10 B DUPLICATE I.D. / COLLECTION TIME VAIN 674	MONITORING WELL IDENTIFICATION	PROGRAM NAME	DATE 3/6
EL (ft bloc) AT TIME OF SAMPLING: 24, 40	Taken i	Vacated well					-	annol o	d Music	>				Begin Purge	Arrived at well	Activity	(L) (L) (L)	29.6	EL (ft bto233.7	4/10101P	IDENTIFICATION _	136 ml	106
SAMPLING:	Taken immediately before campling							1	1	muo	24,25	24.20	24.0			Water Level (ft btoc)		TUB	TOT/	UPLICATE I.D. / (24-	TRUP	SITE N
24.40	ore sampling									14.33 1286	12.46 1283	17.50	13.16			Temp (Deg. C)		TUBING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION T	24-MU-10B	TRIP BLANK I.D	SITE NUMBER
]										1	ii	2251	1711			EC (µmhos/cm)	51	R (in)	H (ft btoc)	IME VG1	S B	レスソフ	24
10T # A								1		1.1 65.5	5.43 1.25	5.58 2.19	6.06 2.48			pH Turbidity (NTU)	5 V(L) 2.05	ly,	4 29	1		U247B1209	
FILTER LOT # \$16532744								1		57.43	5 8.01	53.tp	18.48			Dissolved Oxygen (mg/L)	7			PID RI	PID RE	SAMPI	PURGI
VYV										4 13-9		3 15.9	4.31			oRP (mV)		SAMPLER'S SIGNATURE		PID READING IN BREATHING	PID READING IN CASING (ppm)	SAMPLING DEVICE	PURGING DEVICE
Temperature ±1 (pH ±0.1										Clean	(learn	chein	C/61			Color	7	J.C	(ZONE (ppm)		MICE	MICR
C (1.8 F)													0.60			Volume Purged (L)	edc (u			0. O	0.0	MICROPURGE DEDICATED PUMP	MICROPURGE DEDICATED PUMP
LITY STABILIZAT Conductivity ± 5% Turbidity 5 NTUs				- :-						5.85	12. H	232	1.46	<u> </u>		Pump & Tubing Volumes Purged	\\	D			의	TED PUMP	CED PUMP
± 5% NTUs	X:X	IRP_D	rive\Fie	ld_Worl	⟨\Field_⟨	Coordina	tion\Fo	rms\Tto	042,Fie	ld_Data	_Log_S	heei_M		7		Flow Rate (LPM)				•	0		

		Ē	İ	1	J
2/10/01	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

,	Page
	- ef
	1

DATE	2110106	SITE	SITE NUMBER	24			PURGING DEVICE	DEVICE	MICROPU	MICROPURGE DEDICATED PUMP	ATED PUMP	
PROGRAM NAME	AME 86MP	TRI	TRIP BLANK I.D	V247B1215	5121	5	SAMPLING DEVICE	DEVICE	MICROPL	MICROPURGE DEDICATED PLIMP	ATED DIMP	
MONITORING	MONITORING WELL IDENTIFICATION	24-P	24-PMW-11				. PID READ	PID READING IN CASING (nom)		9	(vented to)	0
SAMPLE I.D.	SAMPLEID. V24 PMWII	DUPLICATE I.D. / COLLECTION TIME	COLLECTION	TIME	1	1	PID READ	ING IN BREATH	ONE (ppm)	00	(vented to)	<u> </u>
STATIC WATE	STATIC WATER LEVEL (ft btoc)	6.35 TOT	TOTAL WELL DEPTH (ft btoc)	TH (ft btoc)	16	19.6						
WATER COLUMN (feet)	MN (feet) 13.25		TUBING DIAMETER (in)	ER (in)	1/4		SAMPLER	SAMPLER'S SIGNATI IRE				
PUMP & TUBING (V) (L)		0.18			5 V (L)	0.90			N	7	9	
Time	Activity	Water Level (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	рH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (L)	Pump & Tubing Volumes	Flow Rate (LPM)
1217	Arrived at well										i mgcd	
1233	Begin Purge											
1235		第1.51	16.24	756	6.38	19.3	3.73	202,0	clear	0.36	2.0	-
1237		7.74	16.10	722	6.44		3.62	207.8	clear	0.72	4.0	-
1239		7.96	16.15	705	6.33	14.2	3.48	238.4	clear	1.08	6-0	
1240	End Purac											
1248	Sample .											
536	Vacated well											
WATER FEV.	ET (4 http://www.laken	aken immediately before sampling.	ore sampling.						$^{\infty}$	ATER QUA	LITY STABI	ILIZATI
Comments:	WALEK EEVEL (II 6006) ALLIME OF SAMPLING: Comments:	SAMPLING: _	0.17	FILTER	FILTER LOT #	7105	N 10532744		PH ± 0.1	.8 F)	Conductivity ± 5% Turbidity 5 NTUs	5 NTUs

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

0										_2												
Comments:	Fe+2 (ppm) WATER LEV	1225				1725	1308	1006	(005	OP TOO	4550	0954	0757	0440	Time	WELL VOLU	WATER COLI	STATIC WAT	SAMPLE I.D.	MONITORIN	PROGRAM NAME	DATE
** could not get	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	Vacated well			_	Sand	mell C			00			Begin Purge	Arrived at well	Activity	WELL VOLUME (V) (gals)	WATER COLUMN (feet)	STATIC WATER LEVEL (ft btoc) 24.	SAMPLE I.D. V244411 DUPLICATE I.D. / COLLECTION TIME	MONITORING WELL IDENTIFICATION	VAME BGA	11/06
ret	aken from f E OF SAM					5,418	3	*	**	**	30.07	28.34			Water Level (ft btoc)	0	7.12.5	V. 39	TAND -	ION 24	P	
- 1	irst bailer in PLING:					1	1						36		Pump Depth (ft btoc)	3 V (gals)		TOTA	ICATE I.D. /	1	TRUP	SITE N
veter	nmediately t					14.68	end	6.3	41.3)	25 tl	16.30	14.60			Temp (Deg. C)	gals) 4.5	CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION	11-04	TRIP BLANK I.D.	SITE NUMBER
mater lavel probe	laken from first bailer immediately before sampling 24.13 Fig. TER L					4884	Pima	1.3 000)	462	7 42 929	18	222			EC (μmhos/cm)		況 (in)	ΓΗ (ft btoc)	TIME	7	124	24
rabe	sampling. FILTER LOT #					3	0	6.(6	6.16	6.19	7.78				pH	AILER BO	2	36.5	1		4121214	
pent .	Aloy			i		3,06		9.65	10.6	(طر (2.28 14.2	52.925t			Turbidity (NTU)	BAILER BOX # 205					214	
part check valve.	Alo4/4059					6.02		6.54	700	7.05	32.5	14.01			Dissolved Oxygen (mg/L)		SAMPI ER'S		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
الأرمد						US: 4		196.6	25.5	p.tw	757.7	1.56			ORP (mV)		SAMPI ERIS SIGNATI IRE		G IN BREATION	PID READING IN CASING (nom)	DEVICE	EVICE
pH ±0.1								Chen	Clean	Clean	Chean	Clean			Color	MA)	ONE (ppm)		DISPOSA	2" SUBMI
	ATER QU. .8 F)							32	6.0	4.5	30	5-			Volume Purged (gals)	X			0.C	3	DISPOSABLE TEFLON RAII ER	RSIBLE GR
Turbidity	ALITY STABILIZAT Conductivity ± 5%							5.0	4,0	2.5	20	رره			Well Volumes Purged	A			(vented to)	(vented to	N RAII ER	2" SUBMERSIBLE GRUNDFOS PUMP
5 NTUs	BILIZATION	X:\IRP_D	rive\Field_V	Work\Field_0	Coordina	ation\Fo	rms\Tte	0050,Fie	ld_Data	_Log_S	hcet_Gr	undfos.a	٠, م		Flow Rate (GPM)		A		© ©	(vented to) O	i	ИP

		<u> </u>	j		$\bigg)$
7/0//	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page	
+	
ا چ	
H	

DATE	19/06		SITE NI IMBER	MRER	24			DI IDORIO DE		7" SURME	RSIBLE GRID	2" SUBMERSIBLE GRUNDEOS BUMD	
PROGRAM NAME	-بح	B	TRIP	TRIP BLANK I.D.	124-	121 2	9	SAMPLING DEVICE	EVICE	DISPOSAI	DISPOSABLE TEFLON BAILER	BAILER	
MONITORING V	MONITORING WELL IDENTIFICATION		24-	4w-11 B	B			PID READING	PID READING IN CASING (ppm)		0.2	(vented to)	9-0
SAMPLE I.D.:	コンイをこって	\ \	CATE I.D. / (PUPLICATE I.D. / COLLECTION TIME	TIME	1		PID READING	PID READING IN BREATHING	ONE (ppm)	0.0	_ (vented to)	0.0
STATIC WATER LEVEL (ft btoc)	1 、	54,7%	TOTA	TOTAL WELL DEPTH (ft btoc)	řoc)	66.9				7	1		_
WATER COLUMN (feet)	N (feet) 23	3.	CASII	CASING DIAMETER (in)	R (in)	~		SAMPLER'S SIGNATURE	SIGNATURE C	//			2
WELL WOLUME (V) (gals)	E(V) (gals)	12.4	3 V (gals)	gals)	Y\	BAILER BOX#	205			not	X	2	
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	рН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
1012	Arrived at well												
[019]	Begin Purge		6(3,75
1024		M.C	_	15.37	PYON .	7-06	17,77	4.32	h-922	(- ex	37.35	12.0	indfos.a
1029		43.10		8.83	1060		M-6	J.h	0.991	Chen	N	270	icet_Gri
1034		46.16			1997	737	10.8	4.23	7581	Chen		0.63	_Log_S
1039		49.09		19.26	(038	17.37	17.1X	4.24	5.221	Clean	15.0	0.84	ld_Date
by of		28.81	_	19.24	913	4.94	15.6	3-73	67.9	Clean	18.38	1.05	5050,Fic
loug		th hs	-	19.59	433	10.09	981	282	323	Ches	225	52-)	orms\Tto
loso	Pury Pa	aned	du	5	Demo	Problem	en	4				1	ation\F
1605	Bein	7. X.X			-								Coordin
(116	,	35.26	-	9.19	927	<i>3C</i> .7	3	4.25	31.3	clandy,	26.25	- - - - - - - - - -	Q (\Field_0
1115		17.73		19.62	940	7.7	13.25	4.53	4011	clouds	20.0	1.68	Id_Wor
1(10		99.02		19.39	stp		4.22	91.h	140,7	Cloudy	K.25). Sg	rive\Fie
(Vacated well												:\IRP_D
Fe+2 (ppm) _		aken from fi	rst bailer in	Taken from first bailer immediately before sampling	efore samplin	1g.	/	100		PARAMETERS FOR WATER QUALITY STABILIZATION	ATER QUA	LITY STABI	LIZATION
WATER LEVE: Comments:	WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments:	E OF SAMI		5227	FILTER LOT #	LOT # 4	7104	401110		Temperature ±1 C (1.8 F) pH ±0.1	.8 F)	Conductivity ± 5% Turbidity 5 NTUs	± 5% NTUs

•/		5	Ī		J
	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page _^2
Ĭ,
Ĕ,
N

	19/06		SITE NI IMBER	MRER	アク			DI INCINIO DE		2" SIJBME	RSIBLE GRID	2" SHBMERSIBLE GRUNDEOS PLIMP	0
PROGRAM NAME	NAME B614	10	TRJP I	TRIP BLANK I.D.	V24	731	B1214	SAMPLING DEVICE	FVICE	DISPOSAE	DISPOSABLE TEFLON BAILER	BAILER	
MONITORIN	MONITORING WELL IDENTIFICATION	ION 	24-1	24-MW-11P	-113			PID READING	PID READING IN CASING (ppm)		4	(vented to)	0.0
SAMPLE I.D.	SAMPLE I.D. 124Mbll Spuplicate I.D. / COLLECTION TIME	LL Source	CATE I.D. / (COLLECTION	TIME	1		PID READING	3 IN BREATHIN	ONE (ppm)	۵	(vented to)	
STATIC WAT	STATIC WATER LEVEL (ft btoc) 34.39	4.39		TOTAL WELL DEPTH (ft btoc)	ГН (ft btoc)	6.5)			
WATER COLUMN (feet)	UMN (feet) 2	5.5%		CASING DIAMETER (in)	3R (in)	2		SAMPLER'S SIGNATURE	SIGNATURE (*
WELL VOLU	WELL VOLUME(V) (gals)	2	3 V (gals)	Ι.	53. 6 BA	ILER BOX	BAILER BOX # 205		i	The state of the s	1	ZX XX	Z
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	рН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
1	Arrived at well												
\	Begin Purge		6/										Q 35
1025	1	607	1	14.63	246	6.55	\$1.7	3.91	(u(.D	donder-	575	2/2	C. Jundios.
328	I I	h	1	We	ָל ה	ζ.							heet_Gr
1305	Sample	52. Pr	1	18.89	434	650	97)	4-30	2.12				a_Log_S
													eld_Dat
													5050,Fie
													orms\Tte
													nation\F
													Coordi
													k\Field_
													eld_Wor
													Orive\Fi
(4/4)	Vacated well												:\IRP_I
Fe+2 (ppm)	(aken from f	irst bailer in	nmediately b	for	ίσ	/\)\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	10		PARAMETERS FOR WATER QUALITY STABILIZATION	ATER QUA	TITY STAE	
WAIER LEV	WAI ER LEVEL (It bloc) AT TIME OF SAMPLING: \$ 2.0 F.	E OF SAM	ELING: 5	7.07	- 1	LOT #	70	FILTER LOT # 7101 1 (0)		pH ±0.1	.8 F)	Turbidity 5 NTUs	5 NTUs

4		-	i		$\Big]$
	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page ____ of ___

comit.	to MDZO u	chad	switch	0 1	& Samp	funge	V	151 failure	Comments:
QUALITY STABILIZAT Conductivity ± 5% Turbidity 5 NTUs	PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C(1.8 F) Conductivity ±5% pH +0.1 Turbidity 5 NTUs		11053274V	• •	FILTER LOT #	ore sampling.	Taken immediately before sampling ME OF SAMPLING: 21.4	Fe+2 (ppm) Taken immediately by WATER LEVEL (ft btoo) AT TIME OF SAMPLING:	Fe+2 (ppm) . WATER LEV
								Vacated well	1510
						_			
							١	> Jamp	1500
							A	End Pu	95h1
	clear 1.80	106	957	3.21	1590 6.41 3.2	1 56 21	21.72		1455
04.61	C/By 1.20	110	4.50	5.26	1590 6.405.26	_	21.3		19451
02.30	clear 0.60	128	4.46	11.4	1580 6.387	128-E1	26.94	,	thhl
1					20) 4	(MPZ	ard c	Ban a	1443
		lure	てた。	cai par on	0	to to	Ge d	End Pro	1241
6 2.15	Clear 0.56	-12.8	6.68	01585	352 658	12.96	20.30		1236
								Begin Purge	1252
								Arrived at well	1210
ne Tubing & Volumes Purged	Color Volume Purged (L)	ORP (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	EC (μmhos/cm) pH	Temp (Deg. C) (µ	Water Level (ft btoc)	Activity	Time
}	JOKCH	, (\ \ \	5 V (L)		16	0.	PUMP & TUBING (V) (L)
9		SAMPLER'S SIGNATURE	. SAMPLER'S		(ft btoc) 36.	TOTAL WELL DEPTH (ft btoc) TUBING DIAMETER (in)	7.30 TUB	(ft btoc)	STATIC WATER LEVEL WATER COLUMN (feet)
	ONE (ppm) (initial) 6.	NG IN BREATHING	PID READIN			OLLECTION TIM	OPLICATE I.D. / C	SAMPLE I.D. V24/AUIZ AUPLICATE I.D. / COLLECTION TIME.	SAMPLE I.D.
(vented to)	om) (initial) 6. O	PID READING IN CASING (ppm)	. PID READIN	,	A	46-12	24-22-	MONITORING WELL IDENTIFICATION _	MONITORING
DICATED PUMP	MICROPURGE DEDICATED PUMP	DEVICE	SAMPLING DEVICE	209	124731209	TRIP BLANK I.D.	TRIP	BEMP	PROGRAM NAME
DICATED PUMP	MICROPURGE DEDICATED PUMP	EVICE	. PURGING DEVICE		74	SITE NUMBER	SITE N	6/06	DATE 7

		5	İ		
3/2/26	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

,	Page
1	
	of
1	\sim

Comments: TD - rechected and get \$6.0	mpling.	545 Vacated well ——————————————————————————————————			1535 Sample 1	1521 End Muge	1205	19.21 12.05	1521 21.61 18.07 1757 6.22	1518 Begin Purge	15.0 Arrived at well ——————————————————————————————————	Time Activity Water Temp EC Level (ft btoc) (Deg. C) (µmhos/cm) pH		15. Pol. /2	STATIC WATER LEVEL (ft bloc) 21 17 TOTAL WELL DEPTH (ft bloc)	DUPLICATE I.D. / COLLECTION TIME	MONITORING WELL IDENTIFICATION $2u-4b-12b$	PROGRAM NAME 1564 TRIP BLANK I.D. U24781204
of the	mpling.						19.14 1705	19.21 12.05	18.57			Temp (Deg. C)		1	btoc <	ı	24-46-126	
	MECENIY						1705 619 2.85 0.45	6.20 2.87 0.49	1257 6.22-45 0.64			pH Turbidity Oxygen (NTU) (mg/L)	1.85		84-4 /CK C		PID REA	
, cario							, 65/ Che	73 66	90 (6			ORP (mV)	4	SAMPLER'S SIGNATURE)	PID READING IN BREATHING ZONE (ppm) (initial)	DING IN CASING (com)	SAMPLING DEVICE
±1 C(1.61)	- % I						7		~ 0.63 1.70			Color Volume Pump & Flow Tubing Rate (L) Purged (LPM)	areal Choi			(vented to)	0.0	MICROPURGE DEDICATED PUMP

Page ____ of ____

WATER LE		I I	1410	Ghii	ij	1136	{{ }	1130	= 127	1124	141	1118	115	101	Time	WELL VOLU	WATER COLUMN (feet)	STATIC WAT	SAMPLE I.D.	MONITORI	PROGRAM NAME	DATE
VEL (ft btoc) AT TII	i	Vacated well	Small	tal long									Begin Purge	Arrived at well	Activity	WELL VOLUME (V) (gals)		STATIC WATER LEVEL (ft btoc)	VAMPANIS	MONITORING WELL IDENTIFICATION	NAME ISLMP	311100
E OF SAMPLING			1h. 8	1	86.31	13.87	77. 9 4	16.91	15.53	13.95	يز	13.18			Water Level (ft btoc)	1	14,4	8.31	TAIND TAIND	ION		
tirst bailer i PLING: _			•		~							-	۳		Pump Depth (ft btoc)	3 V (gals)	CAS	TOT/	ICATE I.D. /	14-P1	TRUP	- SITE N
(.46			17.71		רגוו	17.87	17.76	17.21	16.43	17.77	3	14.51			Temp (Deg. C)		CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	14-PMW-13	TRIP BLANK I.D.	SITE NUMBER
AKEN from first bailer immediately before sampling via OF SAMPLING: (1.16) FILTER I			86.5		} {}	734	፠	३५५	257	379	723	\$\$\$			EC (µmhos/cm)	7.05 B.	ER (in)	TH (ft btoc)	TIME		IIEI BINED	
sampling. FILTER LOT #			אַל		ار:)	6.80	(.87	1.88	6.46	(.7)	14.9	5	}) pH	BAILER BOX#	2	נים,	1			
AIDSZIZHN			にっし		100	+טט	+100	+200	128	44.3	2	שער			Turbidity (NTU)	F F						
NALT			7.62		£.;}	31.2	ער.א	גגא	4.12	6.83	17.29	553	i		Dissolved Oxygen (mg/L)		SAMPLER'S		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
			4.61-		7.17	-17.7).i.	74.5	~lb.0	0.1	2,5	2.5			ORP (mV)		SAMPLER'S SIGNATURE		PID READING IN BREATHING	PID READING IN CASING (ppm)	DEVICE	EVICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C (1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs			(forth)		Chuby	Clock	(long)	Clove	Cluve	(الميرا)	Class	Cloudy brown			Color	1-tr	J.w.	3	ONE (ppm)	(ppm) (initial)	DISPOS	Z" SUBN
S FOR WATER QU ±1 C(1.8 F) ±0.1	-		1		٥.لا	7.01	9.0	7.5	6.0	4.7	-7.0	1.5			Volume Purged (gals)		. March	·	0.0	0.0	DISPOSABLE TEFLON BAILER	MERSIBLE GR
Conductivity Turbidity 5					5.11	4.47	3.83	}.I \$	1.55	1.91	الخ	0.64			Well Volumes Purged				(vented to)	(vented to)	N BAILER	2" SUBMERSIBLE GRUNDFUS PUMP
BILIZATION ty ±5% 5 NTUs		ADD D-	e\Field_Wor	-b/Binia	Coordin	ation!P	OTTOR OTTO	0050 E	old Dav		heat C		2:0		Flow Rate (GPM)				0.0	0.0		وُ

Page of

									c colum	Ham	utic lint	te '>5	
	1			X	time of sompling du	其名	ĺ	Monday at	with quality persons that	25	1 22	ŀ	Comments:
> ±5%	Conductivity ± 5%	(1.8 F)	Temperature ± 1 C (1.8 F)		929	Alphings	# TO,	FILTER LOT #	17.29	PLING: _	E OF SAM	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	WATER LE
LIZATION	YLITY STABI	WATER QUA	PARAMETERS FOR WATER QUALITY STABILIZATION	-			ά <u>ά</u>	Taken from first bailer immediately before sampling	mmediately t	īrst bailer i	laken from t	1	Fe+2 (ppm)
X-()[2]												Vacated well	1300
Drive\E								ý					
eld Wa													
rk\Field													
Coord													
nation\F													
Tylems\T													
10050 F													
												Sample	17.70
1											% 1	Vell stad W	11/4
Shoot (1.15	₹ 0	Clar	1.3-	4.87	87	8. B	782	17.74	4	67.W		<u>ت</u> ة 5 0
	0.58	5	Cloud	; <u>;</u>	7.10	الم	6.86	785	17,40		66.30		NIS.
2.0										P4)		Begin Purge	
												Arrived at well	150
Flow Rate (GPM)	Well Volumes Purged	Volume Purged (gals)	Color	ORP (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	рН	EC (μmhos/cm)	Temp (Deg. C)	Pump Depth (ft btoc)	Water Level (ft btoc)	Activity	Time
			M-A			# 20%	BAILER BOX # 104	7.8 BAI	1	3 V (gals)	2.6	(s)	WELL VOLU
			1/1/4/	IGNATURE _	SAMPLER'S SIGNATURE		مح		CASING DIAMETER (in)	CASI	.0	UMN (feet) 4.0	WATER COLUMN (feet)
		1					573	toc)	TOTAL WELL DEPTH (ft btoc)	TOTA	64.53	STATIC WATER LEVEL (ft btoc) 64.53	STATIC WAT
0.0	_ (vented to)	0.0	ZONE (ppm)	PID READING IN BREATHING	PID READING		7	TIME	COLLECTION	CATE I.D./	E DEFEL	SAMPLE I.D. HATTE VALUE DUPLICATE I.D. / COLLECTION TIME	SAMPLE I.D.
0.1	(vented to)	5,1	pm) (initial) _	PID READING IN CASING (ppm)	PID READING				/- 13B	24-3W-13B	ON	WELL IDENTIFICATION	MONITORING
	BAILER	DISPOSABLE TEFLON BAILER	DISPOSA	EVICE	SAMPLING DEVICE		=	MIRIBLARA	TRIP BLANK I.D	TRUP		NAME BLAR	PROGRAM NAME
	NDFOS PUMP	2" SUBMERSIBLE GRUNDFOS PUMP	2" SUBMI	VICE	PURGING DEVICE			2	JMBER	SITE NUMBER		301618	DATE ——

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CAA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page L of 1

Comments:	WATER LEVEL	-,						lyos	1 6530	12 60		04.30 A	Time	WELL VOLUME(V) (gals) -	WATER COLUMN (feet)	STATIC WATER L	SAMPLEID.	MONITORING W	PROGRAM NAM	00/16/5, BIND
Corred well	WATER LEVEL (ft btoc) AT TIME OF SAMPLING: 37.38	Vacated well						Saufle	mcll 1	,	Begin Purge Guil	Arrived at well	Activity	(V) (gals) Q .	(feet)	STATIC WATER LEVEL (ft btoc) 37.30	SAMPLE I.D. V24MUI44 DUPLICATE I.D. / COLLECTION TIME	MONITORING WELL IDENTIFICATION	PROGRAM NAME 66M	100
	E OF SAMI	,						35.75	baile	١	1		Water Level (ft btoc)	2		7.30		z	~	3
	PLING: 2							1	2	1	١		Pump Depth (ft btoc)	3 V (gals)	casn	TOTA	CATE I.D. / (24-1	TRUP)	- SITE NUMBER
1	nmediately t							19.15	2	18 5			Temp (Deg. C)	i	CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION	MW-14	TRIP BLANK I.D	MBER
nough	ME OF SAMPLING: 37.38 FILTER L							9.85 Nr.9 Etc)		1085 60 20.0			EC (µmhos/cm)	0.65 BAI	R (in)	(S)	TIME	44	112182M1	7
Volum	E. # 1				-			571.9		· to-9			рН	BAILER BOX # 205	N	38.7	1		312	
えな	Alby							9.8		20.0			Turbidity (NTU)	205			'		14	
y 1/h L	37.38 FILTER LOT # AWY 19 054							270		3.72			Dissolved Oxygen (mg/L)		SAMPLER'S SIGNATURE		PID READING	PID READING	SAMPLING DEVICE	PURGING DEVICE
ambour								1936		(H3			ORP (mV)		IGNATURE		IN BREATHIN	PID READING IN CASING (mm)	EVICE	VICE
рп <u>т</u> 0.1										Chean			Color	Ser St	Si.	7	ONE (ppm)		DISPOS,	Mans it
	WATER QU. (1.8 F)									ò			Volume Purged (galo)	X			0.0	٥. ص	DISPOSABLE TEFLON BAILER	EKSIBLE OK
lurbidity	ALITY STABILIZAT Conductivity ± 5%									1.25			Well Volumes Purged	T T			(vented to)	(vented to)	√ BAILER	EKSIBLE OKUNDIOS FUMP
SOING	3ILIZATION y ±5%	Δ/(100	rive\Field_Wor	Wield Coo-	lination	ms Transa	Biole D				1		Flow Rate (GPM)				00	o. C		*

		<u> </u>	Ī		\int
3 / / = .	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page
-
ರ್ಷ
-

DATE	3/10/06	SITE	SITE NUMBER	74				:	ומטסטוויי	ייים ביייטייטיי	1100	
RAM N	AME BGMP	TRUF	BLANK I.D.	TRIP BLANK I.D. \(\frac{724781215}{}	8/2/5	O1	SAMPLING DEVICE	DEVICE	MICROPI	MICROPLINGE DEDICATED PLIMP	TED PILMP	
MONITORIN	MONITORING WELL IDENTIFICATION	24-	24-mw-148	48		į	PID READI	PID READING IN CASING (mm)		0.0	(vented to)	0.0
SAMPLE I.D.	SAMPLEID VZ4mw4B	DUPLICATE I.D. / COLLECTION TIME Y99W633/	COLLECTION	тіме У99 г	V633	/ 1700	PID READ!	ING IN BREATH	PID READING IN BREATHING ZONE (ppm) (initial) _	0.0	(vented to)	0
STATIC WATE	STATIC WATER LEVEL (ft btoc) 37.57	57 TOT	AL WELL DEP	TOTAL WELL DEPTH (ft btoc)	74.8							
WATER COLUMN (feet)	JMN (feet) 37. 2		TUBING DIAMETER (in)	ER (in)	1/4		SAMPLER	SAMPLER'S SIGNATURE	2.0	2	—	
PUMP & TUBING (V) (L)	ING (V) (L)	0.30			5 V (L)	1.50			0	0	9	
Time	Activity	Water Level (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	рН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (L)	Pump & Tubing Volumes Purged	Flow Rate (LPM)
1125	Arrived at well										9	
1142	Begin Purge											0.23
1144		38.04	19.55	60H1	5.92	2.58	3.87	214.1	clear	0.4%	1.53	
1146		38.15	19.79	8011	5.92	1.70	3.74	228.2	clear	0.92	3.07	cet MP
1148		38.22	19.78	1408	5.93	1.68	S.78	225.6	clear	1.38	4.60	Log SI
1150		38.27	19.92	14 12	5.9%	1.53	3.74	230.6	clear	/.84	6.13	d Data
1151	End Purge											0042,Fiel
\$\$11	Sample -											T/Sem
												ation\Fo
												Coordin
												k\Field
							:					eld_Wor
												rive\Fie
1210	Vacated well											:MRP
Fe+2 (ppm)	Taken i	Taken immediately before sampling	ore sampling.						PARAMETERS FOR WATER QUALITY STABILIZATION	ATER QUA	LITY STAB	ILIZATION
WATER LEV	WATER LEVEL (ft btoc) AT TIME OF SAMPLING: 38.27	SAMPLING: _	38.27	FILTER	LOT #	FILTER LOT # _A10419 059	9059		Temperature ± 1 C (1.8 F) pH ± 0.1	1.8 F)	Conductivity ± 5% Turbidity 5 NTUs	/ ±5% 5 NTUs
omments:												

		5	ł		$\Big]$
1/6/1	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page
-
of.

DATE -\$2	9/06		SITE NUMBER	MBER	アイ			PURGING DEVICE	MCE -	2" SUBME	RSIBLE GRU	2" SUBMERSIBLE GRUNDFOS PUMP	P	
PROGRAM NA	PROGRAM NAME 36MP	P	TRJP I	I.D.	V247B1216	312	16	SAMPLING DEVICE	PEVICE	DISPOSAL	DISPOSABLE TEFLON BAILER	RAILER		- 1
MONITORING	MONITORING WELL IDENTIFICATION	[W-h/	24-MW-191	4			PID READIN	PID READING IN CASING (ppm)		0 <u>.</u> 0	(vented to)	0.0	,
SAMPLE I.D.	SAMPLE I.D. V24/4WSA DUPLICATE I.D. / COLLECTION TIME	Mand 🗡	CATE I.D. / C	COLLECTION	TIME	1-		PID READIN	G IN BREATHIN	ONE (ppm)	0.0	(vented to)	0.0	
. STATIC WATE	STATIC WATER LEVEL (ft btoc) 36.56	6.56	LATOT	TOTAL WELL DEPTH (ft btoc)	TH (ft btoc)	59.2	1			7		ر ر	_	
WATER COLU	WATER COLUMN (feet) 2.64	4	CASI	CASING DIAMETER (in)	R (in)	12		SAMPLER'S SIGNATURE		GAZ.		1	_	
WELL VOLUME (V) (gals) -	ME(V) (gals) 0.44	12	3 V (gals)	jals) 1-33		ILER BOX	BAILER BOX # 205	2000		Set of	Tax	7		. 1
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	рН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)	
7580	Arrived at well													
430	Begin Purge		39										5,50	mh
11100	well 1	mae	م	ζ	No.	40	am	rea	Jenas					andios.a
1345	Sample 36,64	36.64	Ì	26.35		6.31	151	hhz	200/2					heet_Gri
														a_Log_S
														eia_Dat
														OUSU,F
			ļ											orms\T
														nation\F
													Carry	Coordi
													ME:-13	KILIGIQ_
													old W	eia Moi
													D=115	DIIVe/F
1400	Vacated well												2.(15.5	virkh"
Fe+2 (ppm) .		àken from fi	irst bailer in	nmediately b	Taken from first bailer immediately before sampling	úα	•		I	PARAMETERS FOR WATER QUALITY STABILIZATION	ATER QU/	ALITY STAI	BILIZATION	,
WATER LEV	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	E OF SAMI	PLING: _	36.64	FILTER	FILTER LOT # _	A10417055	1059		Temperature $\pm 1 \text{ C} (1.8 \text{ F})$ pH ± 0.1	.8 F)	Conductivity ± 5%	ity ±5%	
Comments:														

Page 1 of 1

WATER LEVI	Fe+2 (ppm) .	1120			1105	1100	1059	<i>10</i> 87	1055	1053	1051	1035	Time	PUMP & TUBING (V) (L)	WATER COLUMN (feet)	STATIC WATE	SAMPLE I.D.	MONITORING	PROGRAM NAME	DAIE
WATER LEVEL (ft btoc) AT TIME OF SAMPLING: 37.17	Taken	Vacated well			Sample	End Purge .					Begin Purge	Arrived at well	Activity	NG (Y) (L) 0. 29	MN (feet) 33,0	STATIC WATER LEVEL (ft btoc)36	SAMPLEID VZH MWISB	MONITORING WELL IDENTIFICATION	AME BGMP	
SAMPLING:	Taken immediately before sampling						37.17	37.14	37.11	37.09			Water Level (ft btoc)	29		36.92 TOT	DUPLICATE I.D. / COLLECTION TIME	24-MW-15B	TRI	SITE I
37.17	fore sampling.						19.83	19.83	19.59	19.04			Temp (Deg. C)		TUBING DIAMETER (in)	. TOTAL WELL DEPTH (ft btoc)	COLLECTION	N-15B	TRIP BLANK I.D. \\ \ 2478 1215	SITE NUMBER
FILTER LOT #							2242	2240	2224	2267			EC (µmhos/cm)		R (in)	ΓΗ (ft btoc)	TIME		17247	67
LOT #							14.5	5.72	5.74	5.69			Hq	5 V (L)	1/4	69.9	1		812	
							3.64	4.50	5.73	12.4			Turbidity (NTU)	1.45		ė			5	
A10532744							3.96	3.94	3.79	88.8			Dissolved Oxygen (mg/L)		. SAMPLER		PID READ	. PID READ	SAMPLING DEVICE	 PURGING DEVICE
							175.6	160.9	143.6	123.9			ORP (mV)		SAMPLER'S SIGNATURE		ING IN BREATH	PID READING IN CASING (ppm)	DEVICE	DEVICE
Temperature ±1 C (1.8 F) pH ±0.1	PARAMETERS FOR WATER QUALITY STABILIZATION						clear	clear	clear	alear			Color	6.20	M.	•	ONE (ppm)		MICROP	MICROP
(1.8 F)	WATER OU!						1.84	1.38	0.92	0.46			Volume Purged (L)	6		7		0.0	MICROPURGE DEDICATED PUMP	MICROPURGE DEDICATED PUMP
Conductivity ± 5% Turbidity 5 NTUs	LITY STAE						6.34	4.76	3.17	1.59			Pump & Tubing Volumes Purged				(vented to)	(vented to)	ATED PUMP	ATED PUMP
y ± 5% 5 NTUs	ILIZATION		rive\Field_W				•			-	0.23		Flow Rate (LPM)				1	0.0		

		5	Ť		$\Big]$
12/3/7	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page of

Fe+2 (ppm) WATER LEY Comments:	1700	1245	1235	32)	ru;	(210	17.6	1215	(16	1206	1205	1200	(55)	1145	Time	WELL VOLU	WATER COLUMN (feet)	STATIC WAT	SAMPLE I.D.	MONITORIN	PROGRAM NAME	DATE
VEL (ft btoc) AT TIN) Vacated well	Sandy	End Rung				1630 M			lack h	7 -		Begin Purge	Arrived at well	Activity	WELL VOLUME(V) (gals)		STATIC WATER LEVEL (ft btoc)	U2444165 DUPLICATE I.D. / COLLECTION TIME	MONITORING WELL IDENTIFICATION	HAME BGMP	30/16/6
Taken from f		39.70	sn.hn	አ ረንአ	52.m	תע,עץ	المحم	na.ih	44.0	g	13.8s	18.8h			Water Level (ft btoc)	23.9	4	38.79	19 DUPL		P	,
irst bailer i		4	-				35	6	-	39	· (=	 	75		Pump Depth (ft btoc)	3 V (CAS	ļ	CATE I.D./	24-1	TRUP	— SITE NUMBER
immediately by		6.10	21.54	51. ug	71.62	21.57	1	71.55	21.63	1	21-54	2150			Temp (Deg. C)	3 V (gals) 7(.7	CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION	MWI	TRIP BLANK I.D.	UMBER
efore		188	283	950	950	128		the	256		356	959			EC (µmhos/cm)		SR (in)	TH (ft btoc)	TIME	673	1247	24
sampling. FILTER LOT #		6.64	5.64	98.8	5,59	ر ا		435	803		, i	6-64) pH	BAILER BOX#	7	SE	1		4121274	
1104		15.5	7	2.05	3,03	7.12		438	14.71		6.085.80	243			Turbidity (NTU)	205		7			C	
110419059		h8.t	507	45.15	27.76	72.9		23.8	9.(3		8.29	803			Dissolved Oxygen (mg/L)		SAMPLER'S SIGNATURE,		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
		241.9	17.7	1.74)	169.2	155,2		17.4	1882		175.3	201.8			ORP (mV)		SIGNATURE		G IN BREATIUN	PID READING IN CASING (ppm)	DEVICE	VICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C(1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs		Chear	Clean	Clean	Cheen	clear		cles	Clean		Char	clean			Color	Jones H			ONE (ppm)		DISPOSA	2" SUBM
WATER QUA			(20-0)	1650	90.0	7.0		60.0	0-5h	45.0	20.0	631			Volume Purged (gals)	X	3		0.0	o. 4	DISPOSABLE TEFLON BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
LITY STABILIZAT Conductivity ±5% Turbidity 5 NTUs			5,02	0439	77.5	2)3		2.50	٠ ٢٤	4	(-25-)	062			Well Volumes Purged	3			_ (vented to)	(vented to)	BAILER	NDFOS PUMF
SILIZATION 5 NTUs	X:\IRP_	Drive\Fi	eld_Wor	k\Field_	Coordin	ation\Fc	orms\Tto	050,Fie	eld_Data	a_Log	Sheet C	rundfos.	3.0		Flow Rate (GPM)		J		þ	0.0		

Page / of ___

ļ	Comments:	WATER LEVEL (Fe+2 (ppm)	1012 V					1000 5	 	95%	4560	0952	0950 B	0930 A	Time	PUMP & TUBING (V) (L)	WATER COLUMN (feet)	STATIC WATER LEVEL (ft btoc)	SAMPLE I.D.	MONITORING WE	PROGRAM NAME
(1	(w)	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	Taken	Vacated well					SAMPLE	END PURGE				Begin Purge	Arrived at well	Activity	(V) (L)		VEL (ft btoc)	V 14 MW/\$\$ DUPLICATE I.D. / COLLECTION TIME	MONITORING WELL IDENTIFICATION	BaMP
(Uater 900	water drew	SAMPLING:	Taken immediately before sampling								38.03	38.03	36.01			Water Level (ft btoc)	0.36		37.97 TOT	DUPLICATE I.D. /		
is back .	drove back about 40 me	38.02	ore sampling.								18-24	18.14	17.82			Temp (Deg. C)	6	TUBING DIAMETER (in)	. TOTAL WELL DEPTH (ft btoc)	COLLECTION	-4.	TRIP BLANK I.D
Total Part	x about	FILTER LOT #									1173	1168 5-79	1158			EC (µmhos/cm)		(in)	ΓΗ (ft btoc)	TIME	71-MW-17B	N=4761-15
6 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Some Of	LOT #	i						\perp		5.79	5.79	18.5			рН	5 V (L)	114	70	1	ZB	70
15 CK	İ	A/	•								1.59	5.75	30.1			Turbidity (NTU)	8.7	4	82.7	1		18
goes book and fine other was seen seems!	or gar	1104/9059	•								5.50	5-40	5.56			Dissolved Oxygen (mg/L)		SAMPLER!		PID READI	PID READI	SAMPLING DEVICE
	ofter gery yours.	9									187.1	185.6	1843			ORP (mV)		SAMPLER'S SIGNATURE		PID READING IN BREATHING	PID READING IN CASING (ppm)	DEVICE
		Temperature ± 1 C (1.8 F)	PARAMETERS FOR WATER QUALITY STABILIZATION								clear	Clear	clear			Color	Market	4		ONE (ppm)		MICROPI
		1.8 F)	VATER OU/								1.44	0.%	0.48			Volume Purged (L)	<u> </u>	de de		0.0	4	MICROPURGE DEDICATED PUMP
	I di Didity	Conductivity ± 5%	TITY STAI								4.00	267	1.33			Pump & Tubing Volumes Purged		ξ.		(vented to)	(vented to)	ATED PUMP
	OWICS	ty ±5%	BILIZATION	GNRP Dr	ve\Field_Wo	rk\Field Coo	ordination\Fe	orms\TtoO	42.Fiel	d Data	Log S	neet M		14.0		Flow Rate (LPM)				c.	6.7	

Page ____ of ____

Turbidity 5 NTUs		рН ±0.1		مرام م	V!!	or to	WA APA	130	The state of	المرادة	S. F. P. M.	Comments:
ALITY STABILIZAT Conductivity ± 5%	/ATER QU/ I.8 F)			9059	Albyla 059	sampling. FILTER LOT #	Taken from first bailer immediately before sampling AE OF SAMPLING: ALY FILTER L	nmediately t	irst bailer in PLING:	laken from f E OF SAM	Fe+2 (ppm) Taken from first baile WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	Fe+2 (ppm) WATER LEV
											Vacated well	1570
		(lov)	0.04	7.03	+200	7.14	636	7,1	1,	אייר	Sample	1450
1.80		(Sub)	ē	4		2	2	67. 1	125	V/ 1.82	the furt.	17 57
1.60	77.7			OF'L	1.53	33	3 3	17.64		18.64		
- 23	7.4	C AND	7.31-	6.43	0,43	6.54	3	7.13		20.6%		مولاً ا
1.06	10.0	CIMI	-1.2	5.10	61.6	7.03	2	17.04		18.43		1304
0.80	3.5	Clay	~II.7	6.32	34.6	100	212	1, 68		ור.רו		1254
0.53	5.0	(luud)	۲.۶۰	(.)	7.78 7.78	٦.	270	16.47		16.14		hsti
74.0	7.5	(Isra)	٦١.4	6.73	35.7	7.19	815	7.52	_	.T.		JAN C.
7.0						1			Z		Begin Purge	- Jayy
											Arrived at well	110
Well Flow Volumes Rate Purged (GPM)	Volume Purged (gals)	Color	ORP (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	рН	EC (µmhos/cin)	Temp (Deg. C)	Pump Depth (ft btoc)	Water Level (ft btoc)	Activity	Time
	A	Title Ol	SIGNATURE	SAMPLER'S SIGNATURE	**************************************	BAILER BOX # WY		DIAME	CASING I	3 .		WATER COLUMN (feet) WELL VOLUME(V) (gals)
						- 5	'H (ft btoc)	TOTAL WELL DEPTH (ft btoc)	TOTA:		STATIC WATER LEVEL (ft btoc)	STATIC WATI
(vented to)	0.0	PID READING IN CASINC (ppm) (initial) — PID READING IN BREATHING ZONE (ppm) (initial) —	PID READING IN CASING (ppm) PID READING IN BREATHING Z	PID READING		171	TIME	DUPLICATE I.D. / COLLECTION TIME	CATE I.D. /		MONITORING WELL IDENTIFICATION SAMPLE I.D. VAY PAW I	MONITORIN SAMPLE I.D.
	DISPOSABLE TEFLON BAILER	DISPOSAL	EVICE	SAMPLING DEVICE		1111	PI FI BLANCA	TRIP BLANK I.D.	TRUP		AME USING	PROGRAM NAME
2" SUBMERSIBLE GRUNDFOS PUMP	RSIBLE GRU	2" SUBME	VICE	PURGING DEVICE			24	JMBER	— SITE NUMBER		2/4/84	DATE

Page ______of _____

DATE 07 110	10/00	SITE	SITE NUMBER	N	24		PURGING DEVICE	DEVICE	MICROPUR	GE DEDIC/	MICROPURGE DEDICATED PUMP	
PROGRAM NAME	BGMD	TRIF	TRIP BLANK I.D	アン	1713	5151 81-HEA	SAMPLING DEVICE	DEVICE	MICROPUF	(GE DEDIC/	MICROPURGE DEDICATED PUMP	
MONITORING WE	LL IDEN		14-PM	4- PMN-19			PIN READI	PID READING IN CASING (nom)		0.0	(vented to)	0
SAMPLE I.D.	DUPLICATE I.D. / COLLECTION TIME	JPLICATE I.D. /	COLLECTION	TIME	1	1	PID READI	NG IN BREATHI	ONE (ppm)	0.0	1 1	0
STATIC WATER LEVEL (ft btoc)	VEL (fl btoc)	5. \$7 TOT	TOTAL WELL DEPTH (ft btoc)	ГН (ft btoc)	25.						•	
WATER COLUMN (feet)	(feet) / 1.53		TUBING DIAMETER (in)	ੌR (in)	7	4	SAMPLER!	SAMPLER'S SIGNATURE	rote v	1) Mose	74.	l l
PUMP & TUBING (V) (L)	(V)(L)	o.	0-22		5 V (L)	1.1			15	>		
Time	Activity	Water Level (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	pН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (L)	Pump & Tubing Volumes Purged	Flow Rate (LPM)
1330 +	Arrived at well											
/337 E	Begin Purge -											2.18
1340		6.78	17.06	1251	63.3	17.6	415	-32.5	Clear	0.54	2.45	
1343		741	17.11	1202	6-93	3/.7	5.02	-32.8	Cloudy	80.1		
1346		7.91	17.17	1138	699	202	25.5	1	cloudy	29.1	7.36	6
1347 2	END PURGE	[M						-15.7				
1350 5	_											
1400 V	Vacated well -											
Fe+2 (ppm)	Taken in	Taken immediately before sampling	ore sampling.			۸ ۱۰.	110.1	3	PARAMETERS FOR WATER QUALITY STABILIZATION	ATER QU/	ALITY STAE	BILIZATION
WATER LEVEL (WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	SAMPLING: .	8-23	l	FILTER LOT #	H	15061 AO H		Temperature ±1 C(1.8 F) pH ±0.1	8 F)	Conductivity ± 5% Turbidity 5 NTUs	y ±5% 5 NTUs
Comments:												

		<u> </u>	Ĭ		ر
34 / 7 / 77	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page
—
of
\

DATE 710106	SITE NUMBER	JMBER	74		•	PURGING DEVICE	EVICE	MICROPU	MICROPURGE DEDICATED PUMP	TED PUMP	
PROGRAM NAME	BGFIT TRIP	TRIP BLANK I.D	V24	V24TB 1215	1/5	SAMPLING DEVICE	DEVICE	MICROPI	MICROPURGE DEDICATED PUMP	TED PUMP	
MONITORING WELL IDENTIFICATION		4-MW-19B	1-193			PID READI	PID READING IN CASING (mm)		0.4	(vented to)	0.0
SAMPLEID V24 MW/98	7B DUPLICATE I.D. / COLLECTION TIME	OLLECTION T		9463	V99~634/1700	PID READII	NG IN BREATH	ONE (ppm)	0.0	(vented to)	1 1
STATIC WATER LEVEL (ft btoc)	66-18 TOTA	TOTAL WELL DEPTH (ft btoc)	btoc)	70.8				ļ)	
WATER COLUMN (feet)	4.5 TUBI	TUBING DIAMETER (in)	R (in)	1/4	1	SAMPLER'S	SAMPLER'S SIGNATURE		水	1) L	\
PUMP & TUBING (V) (L)	6	0.16		5 V (L)	oso						
Time Activity	Water Level (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	T Hq	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (L)	Pump & Tubing Volumes Purged	Flow Rate (LPM)
1230 Arrived at well	ell										
1236 Begin Purge											2
1240	84.66	15.9	1503	Lo"	9.49	2.29	29.2	dear	40.0	95./	,
thc/	66-28	1722	1496		7.05	1.37	43/	alex	840	3.00	
ttt.	66.28	(7-79	(500		3.86	0.79	2.9	clear	42	4.50	
9777	ge-38	18.30	1507 6.35 2.75	6.35	2.75	55.0	-20.6	clear	0.96	6.00	_
1247 END PU	Pupule -										$ \cdot $
1240 CAMPLO	1										
		-	;								
33b Vacated well											
Fe+2 (ppm) Taken immediately b WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	Taken immediately before sampling. ME OF SAMPLING: 66-26	e sampling.) FILTER LOT #	10T #	Alou	24011701A	,	PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C(1.8 F) Conductivity ±5%	VATER QUA 1.8 F)	LITY STABILIZAT)
Comments:										Turbidity	5 NTUs

	<u> </u>	İ		$\Big]$
Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

d	Page
	_
;	₹,
	-

TEIRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page ____ of ____

Fe+2 (ppm) WATER LEV Comments:	1300		1340	5	1104	1.04	754	1054	Shai	1030	Time	WATER COLUMN (feet) WELL VOLUME (V) (ga	STATIC WAT	SAMPLE I.D.	MONITORIN	PROGRAM NAME	DATE
Fe+2 (ppm) Taken from first baile WATER LEVEL (ft btoc) AT TIME OF SAMPLING: *** ** ** ** ** ** ** ** ** ** ** ** *	Vacated well		Single	EN Pry !					Begin Purge	Arrived at well	Activity	ls)	STATIC WATER LEVEL (ft btoc)	IR MAJARA	MONITORING WELL IDENTIFICATION	NAME SUPP	101610
Taken from f AT TIME OF SAM			18.86	well pure	*	\$2.00	17.4	17.63			Water Level (ft btoc)	و د ا	491	DUPL			
first bailer in PLING:			ا	م وي	-		2.12	採	16.5		Pump Depth (ft btoc)	CASING I	TOTA	ICATE I.D. /	24-PMU-21	TRIP	— SITE NUMBER
mmediately 12. %1			17.64		17.62	13.61	<u>ار</u> بود:	Sh.9(Temp (Deg. C)	JIAM.	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	يني	TRIP BLANK I.D.	JMBER
Taken from first bailer immediately before sampling. ME OF SAMPLING: 12.81 FILTER L That wash to drap			(00)		848	428	S.	4))			EC (µmhos/cm)		ΓΗ (ft btoc)			MIRIOLAR	E
sampling. FILTER LOT #			16.9		%	6.3	6.34	(.x) pH	BAILER BOX # 105	י. ציי	1		1111	
2			39.0		13.5	5.67	6.53	11.7			Turbidity (NTU)	105				į	
HICK AIM			7.86		ኒ ኒ	78.3	7.37	7.74			Dissolved Oxygen (mg/L)	SAMPLER'S SIGNATURE		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
			-12.4		5.2	۶.५	11.0	<u> </u>			ORP (mV)	SIGNATURE		PID READING IN BREATHING	PID READING IN CASINC (ppm)	DEVICE	EVICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C(1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs			Clang		(but	C I	()(6)	Clear			Color	Peta Da	Mr. /	ONE (ppm)	pm) (initial)	DISPOS,	2" SUBM
WATER QU (1.8 F)					10.0	<u>ئ</u> ر	4	بز			Volume Purged (gals)	A.		6.0	- - -	DISPOSABLE TEFLON BAILER	ERSIBLE GR
ALITY STABILIZAT Conductivity ± 5% Turbidity 5 NTUs					7.4	۲. ۲.	1.72	0.8			Well Volumes Purged	7		(vented to)	(vented to)	N BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
BILIZATION ity ±5% 5 NTUs		d_Work\Field_Coord			*			ĺ	0.7		Flow Rate (GPM)			0,0	0.4		₫P

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page of

	SAMPLING DEVICE	EVICE	DISPOS	DISPOSABLE TEFLON BAILER
	PID READING	PID READING IN CASING (nom)	nm) (initial)	o. ≥
`	PID READING	IN BREATHING	G ZONE (ppm) (initial)	
64.5			<u>.</u>	•
	SAMPLER'S S	IGNATURE		, ک
BAILER BOX # 105			Hete O	lle
Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)
6.33	3	151.7	(lad)	节
7.14	3.14	0.3MI~	(hud)	٥٠
۲. ۲	0.96	162.2	المدوا	7.D
זניא	0.77	1.031-	law	u.0
120	14	13h-	Clar	
		ų -	ARAMETERS FOR	WATER OILA
	Turbidity (NTU) 12.0 12.0 13.0 14.7 14.7 14.7 14.7 14.7 14.7	A653	SAMPLER'S SIGNATURE SAMPLER'S SIGNATURE Dissolved ORP Oxygen (mV) 1,30 151. 7 3.16 - 161.3 0.77 - 50.1	SAMPLER'S SIGNATURE SAMPLER'S SIGNATURE

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page of

LIZATION y ± 5% 5 NTUs	ALITY STABI Conductivity Turbidity 5	ATER QUA .8 F)	PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C(1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs		A104 16059	Alou	sampling. FILTER LOT #	efore	mmediately b	first bailer ii PLING:	laken from 1 E OF SAM	Fe+2 (ppm) Taken from first baile WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments:	Fe+2 (ppm) WATER LE' Comments:
X:\IRP												Vacated well	1350
Drive\Field_\													
Work\Field													-
Coordi		1	Cloudy	2.5	7.64	73.0	1 14	543	18.50	ı	15.14	SAROK	1341
nation\F									24	· cal	DRY	Well purped	אנו
orms\Tt	₹.64	£:0	(Mer-	-q.1	1.03	11.4	6,94	178	رة. يح	-	23.5		1334
0050.Fi	2.95	6.5	Clar	7.8-	אנור	ē.	120	888	17.82		13.30		1881
eld Dai	רני	2.5	Cker	0.}	474	مَنَ	ŝ	318	1.8		4(10		1328
a Log	בּ	3.5	Char	8.0	12.57	7.63	6.96	Cir	15.10		= 2.52		1325
Sheet G	0.91	0.0	الأفر	ري	10.58	95'y	7.04	359	15.10		17.84		Į.
rundfos	0.45	10	Csouls	-0.3	M''Q!	رز	7.0 5	360	15.06	-	17.06		1320
o. T										2.5		Begin Purge	1318
												Arrived at well	21(1
Flow Rate (GPM)	Well Volumes Purged	Volume Purged (gals)	Color	ORP (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	рН	EC (μmhos/cm)	Temp (Deg. C)	Pump Depth (ft btoc)	Water Level (ft btoc)	Activity	Time
			1-10-			* 404	BAILER BOX # 104	6,6 BA		3 V (gals)	سفا		WELL VOLUME (V) (gals)
		The	DIM.	JIGNATURE	SAMPLER'S SIGNATURE		1	R (in)	CASING DIAMETER (in)	CASII	3.2		WATER COLUMN (feet)
		. / /	·				7.5	'H (ft btoc)	TOTAL WELL DEPTH (ft btoc)	TOTA	14.31	STATIC WATER LEVEL (ft btoc)	STATIC WATI
0.0	_ (vented to)	0.0	ONE (ppm)	PID READING IN BREATHING	PID READING		-1-	TIME	DUPLICATE I.D. / COLLECTION TIME	CATE I.D. /	'	LE MUS HEA	SAMPLE I.D.
8.3	(vented to)	×	ppm) (initial) <u> </u>	PID READING IN CASING (ppm)	PID READING				Tr - MWd - hr	19 - hr	ION	MONITORING WELL IDENTIFICATION	MONITORIN
	BAILER	DISPOSABLE TEFLON BAILER	DISPOSABI	EVICE	SAMPLING DEVICE		1	וונו מחלע	TRIP BLANK I.D.	TRIP		AME BLAR	PROGRAM NAME
	2" SUBMERSIBLE GRUNDFOS PUMP	SIBLE GRU	2" SUBMER	VICE	PURGING DEVICE				MBER	— SITE NUMBER		9A1116	DATE

ğ	
numbe	
7	
-049	
(9/05)	

		<u> </u>	f		ر
3/7/66	Telefax (805) 68) 3108	Telephone (805) 6\(\begin{aligned} & 1-3100 \end{aligned} & \text{3 \text{100}}	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page
1
of.
1

Fe+2 (ppm) WATER LEV Comments:	17/0					1635	(633	457	(630	849/	%व	H69/	1614	Time	WATER COLUMN (feet) _ PUMP & TUBING (V) (L)	STATIC WAT	SAMPLE I.D	MONITORIN	PROGRAM NAME
Fe+2 (ppm) Taken immediately by WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments:	Vacated well					Jample	the lunge	7				Begin Purge	Arrived at well	Activity	(5.3)	STATIC WATER LEVEL (ft btoc)	SAMPLEID VƏHHUZA	MONITORING WELL IDENTIFICATION	NAME SAMP
Taken immediately before sampling AE OF SAMPLING: 33.								23.03	22.74	27.72	32.51			Water Level (ft btoc)	10 + 100 HBUT 1.	TOI TOI	DUPLICATE I.D. / COLLECTION TIME.	24-	TRIF
efore sampling.								16.73	16.63	16.46	16.25			Temp (Deg. C)	TUBING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION	RE-MM-78	TRIP BLANK I.D
FILTER								1193	1193	1/93	4611			EC (µmhos/cm)		TH (ft btoc)	TIME	\$ 4	147
LOT #								6.//	6.1	6.11	6.09			рH	2 V (E)	45.	1		18776
A103								7.88	10.4	7.95	6.99			Turbidity (NTU)	75.1			-	1/8/
FILTER LOT # \$\(\omega \) \(\omega \								5.86	5.95	6.14	6.46			Dissolved Oxygen (mg/L)	- SAMPLER	•	PID READI		 PURGING DEVICE SAMPLING DEVICE
								7.0-	6.0	<u>ی</u>	4.4			ORP (mV)	SAMPLER'S SIGNATURE		NG IN BREATH	PID READING IN CASING (2007)	DEVICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C(1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs								C/car	C/ear	Clear	C/Car			Color	My A	7	PID READING IN BREATHING ZONE (ppm) (initial) _		MICROPI
/ATER QUA								1.60	0¢./	0.80	04,0			` Volume Purged (L)		\bigcirc	0.0	G. a	MICROPURGE DEDICATED PUMP MICROPURGE DEDICATED BUILDE
ALITY STABILIZAT Conductivity ± 5% Turbidity 5 NTUs								5./6	3.87	2.58	(یه)		800	Pump & Tubing Volumes Purged			(vented to)	ALEO TOMIT	MICROPURGE DEDICATED PUMP MICROPURGE DEDICATED PUMP
SULIZATION y ±5% 5 NTUs	\IRP_Dr	ive\Field_V	Vork\Field	_Coord	nation\F	orms\Tto	042,Fie	ld Data	Log_S	cet_MP.	- 1	0 0		Flow Rate (LPM)			0	0	

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page 1 of 1

PROGRAM NAME	PROGRAM NAME BGMP		SITE NUMBE	₹ ¥ □ □	24 VANTBIAII	116		PURGIN SAMPLI	IG DE	PURGING DEVICE			2" SUBMERSIBLE GRUNDFOS PUMF DISPOSABLE TEFLON BAILER
SAMPLE I.D.	SAMPLEID. VIUNUIJA	٠.	JCATE I.D. /	DUPLICATE I.D. / COLLECTION TIME	TIME	-1.		PID RE.	ADING SEE	ADING IN BREATHIN	PID READING IN BREATHING ZONE (ppm) (initial)	PID READING IN BREATHING ZONE (ppm) (initial)	ONE (ppm) (initial) -
STATIC WAT	STATIC WATER LEVEL (ft btoc) 65.70	65.70	TOTA	TOTAL WELL DEPTH (ft btoc)	TH (ft btoc)	69.2							
WATER COLUMN (feet) WELL VOLUME (V) (ga	WATER COLUMN (feet)	7.5	CASING I	DIAMETI		H BAILER BOX#	×# 205	SAMP	LER'S S	SAMPLER'S SIGNATURE	LER'S SIGNATURE	LER'S SIGNATURE	LER'S SIGNATURE
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	рH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	olved gen /L)	olved ORP (mV)		ORP (mV)	ORP (mV) Color
2480	Arrived at well					-							
9256	Begin Purge		68										
1001		67.10		15:81	320	5.70	+100	9.6		1 10.1	1 10.1 Clouds	_	1 Cloudy
1003		14.69		١٣.١٧	60,	۲.۲	\$200	ج	4.06	N.S 90		N.S.	S.Y Clark
1005		67.78		13.96	129	5.88	1200	,o	9. 40	40 3.0	<i>ا</i> سا	3.0	3.0 (Im)
ig S		61.15	4	18.61	657	6.8	133		MC'L	7M 1.0	-	1.0	1.0 Clove, 4
2001	FUS LINE	Merc	UNY	1				$\ $					
1620	Sample	(6.80	(18.66	156	E	+200	AIT.		- T. I. J		L'11-	L'11-
1030	vacated well												
Fe+2 (ppm)	1	Taken from	first bailer i	mmediately	Taken from first bailer immediately before sampling	ng.					PARAMETERS FOR	PARAMETERS FOR WATER QU	PARAMETERS FOR WATER QUALITY STABILIZATION
VATER LE	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	ME OF SAM	IPLING: _	(6.9)	FILTER	FILTER LOT #	Alur	A104 1 4059			Temperature ±1 C pH ±0.1	Temperature ±1 C(1.8 F) pH ±0.1	Temperature ±1 C(1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs
Comments:													



Page 1 of

(1)2 Vacat			1100 SAI	1056 END	1655	1053	1051	1049	/0 47 Begi	10 38 Arri	Time A	PUMP & TUBING (V) (L)	WATER COLUMN (feet)	STATIC WATER LEVEL (ft btoc)	SAMPLE I.D. VA	MONITORING WELL IDENTIFICATION	PROGRAM NAME	DATE
Taken ir	Vacated well		SAMPLE	D DURGE					Begin Purge	Arrived at well	Activity		40	.(ft btoc) 37 .	V14mW13BDUPLICATE I.D. / COLLECTION TIME	DENTIFICATION _	BGMP	7/10/06
nmediately befo				GE -	77.51	37.51	37.51	8th 128			Water Level (ft btoc)	0.33		37.46 TOT	UPLICATE I.D. /			ŀ
Taken immediately before sampling.					17.42	17.50	17.61	(7.59			Temp (Deg. C)		TUBING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION	24- MW-23B	TRIP BLANK I.D	SITE NUMBER
					858	868	8 75	920			EC (µmhos/cm)		R (in)	ГН (ft btoc)	TIME	W-231	V-4-TB 215	#
					40.2	6.04	6.03	6.04			рН	5 V (L)	_		1	3	B 12	
>					208	1.58	2.09	Z.12			Turbidity (NTU)	1.65	1/4	77.9	,		15	
A indiants					5-69	118.7	49.5	6.12			Dissolved Oxygen (mg/L)		SAMPLER'S		PID READI	PID READI	SAMPLING DEVICE	PURGING DEVICE
র					1747	1737	1221	172.0			ORP (mV)		SAMPLER'S SIGNATURE		PID READING IN BREATHING	PID READING IN CASING (ppm)	DEVICE	DEVICE
PARAMETERS FOR WATER QUALITY STABILIZATION					clear	Clear	clear	clear			Color	Porton	Jourse		ONE (ppm)		MICROPU	MICROPL
TERS FOR WATER QU					1.92	1.44	0-94	0.46			Volume Purged (L)	-	illi		0.0	9.8	JRGE DEDIC	RGE DEDIC
ALITY STABILIZAT						~	290	1.4			Pump & Tubing Volumes Purged		ľ		(vented to)	(vented to)	MICROPURGE DEDICATED PUMP	MICROPURGE DEDICATED PUMP
		Coordination\For			4			7	2011		Flow Rate (LPM)				c	1.4		

TETRA TECH, INC.
42.13 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page ____ of ____

Fe+2 (ppm) Taken immediately be	143			74.7	11 3 \$2	1130	1/2/1	1127	7411	1123	6111	Time	PUMP & TUBING (V) (L)	WATER COLUMN (feet)	STATIC WATER	SAMPLE I.D.	MONITORING	PROGRAM NAME	DATE
Taken	Vacated well			XAMPIY	THE BEND BURGE					Begin Purge	Arrived at well	Activity			STATIC WATER LEVEL (ft btoc)	SAMPLE I.D. V24MW4B DUPLICATE I.D. / COLLECTION TIME.	MONITORING WELL IDENTIFICATION	BAMP	03/10/06
Taken immediately before sampling					10 Purg	35.14 17.74	35.14	35.14	35.13			Water Level (ft btoc)		42.0 TUI	35-10 TOT	DUPLICATE I.D. /			ļ
ore sampling.					4	17.74		17.84	1728			Temp (Deg. C)		TUBING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION	1	TRIP BLANK I.D	SITE NUMBER
						2212 6.75	14.1 87.3 1.91元	4701	1779			EC (µmhos/cm)		ER (in)	TH (ft btoc)	TIME	14 - MU- 24B	124 TB	4
						6.75	5.76	81.2 173	165			рН Т	5 V (L)	1/4	77.	-/	48	د/ 18	
						<u>ال</u> ا.	1.44	2.18	3.39			Turbidity (NTU)	1.7		1	1		5KC	
						6.30	6.43	44.9	6.86			Dissolved Oxygen (mg/L)		SAMPLER		PID READI	PID READI	SAMPLING DEVICE	PURGING DEVICE
					ŀ	1929	1925	1928	188.0			ORP (mV)		SAMPLER'S SIGNATURE		PID READING IN BREATHING	PID READING IN CASING (mm)	DEVICE	DEVICE
PARAMETERS EOR WATER OHIAI ITV STABII IZATION						C/ear	clear	clear	Clear			Color	M-NY	John		NG ZONE (ppm) (initial) -		MICROP	MICROP
						1.92	144.1	0.96	p. 48			Volume Purged (L)				0.0	0.0	URGE DEDIC	URGE DEDIC
AI ITV STAR						$\neg \neg$		2.82	14.1			Pump & Tubing Volumes Purged		, ,		(vented to)	(vented to)	MICROPURGE DEDICATED PLIMP	MICROPURGE DEDICATED PUMP
II IZATION		ield_Work\Fie				4			-	44.0		Flow Rate (LPM)				1 1	9		

		<u>.</u>	İ	1	J
02/10/00	Telefax (805) 681-3108	Telephone (805) 681-3100	Santa Barbara, CA 93110	4213 State Street, STE 100	TETRA TECH, INC.

Page
\
ဋ

Fe+2 (ppm) Taken immediately b WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	Vac Vac						1216	hiri	1212	12/10	1208	/ 206 Be _l	1200 An	Time	PUMP & TUBING (V) (L)	WATER COLUMN (feet)	STATIC WATER LEVEL (ft btoc)	SAMPLE I.D. V2	MONITORING WELL IDENTIFICATION	PROGRAM NAME _	DATE //7/
Taken in the btoc) AT TIME OF	Vacated well			7711172	W PI F	FND DURGE						Begin Purge	Arrived at well	Activity	(L)	et)	EL (ft btoc) 23.51	SAMPLE I.D. V24MW25B DUPLICATE I.D. / COLLECTION TIME	IDENTIFICATION _	BGMP	0/ 00
Taken immediately before sampling. AE OF SAMPLING: 23.58				1			23.58 1586 1588 5.71	13.58 15.86	22,58 15.95	23.5%	23.58			Water Level (ft btoc)	0.35		. 51 TOTA	UPLICATE I.D. / C	K	TRIP	SITE N
ore sampling. 23. 58							1484		15.95	16.10	16.36			Temp (Deg. C)		TUBING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	COLLECTION :	M-MN	TRIP BLANK I.D.	SITE NUMBER
							1588	16.5 2091	1653	1730	1871			EC (µmhos/cm)		3R (in)	TH (ft btoc)	TIME	95c-	4د/	74
FILTER LOT #							4.7		5-72	41.3	5-78			pH	5 V (L)	1/4	57	- /		V2478 1215	
l							0.67	0.52	1653 5-72 0.54	730 574 0.76	1.4o			Turbidity (NTU)	1.75		50.3	1		212	
							3.02	3.10	3-28	3.87	481			Dissolved Oxygen (mg/L)		SAMPLER'S		PID READII	PID READII	SAMPLING DEVICE	PURGING DEVICE
						1 1		1920	192.5	192-2	(935			ORP (mV)		SAMPLER'S SIGNATURE		NG IN BREATH	PID READING IN CASING (ppm)	DEVICE)EVICE
PARAMETERS FOR WATER QUALITY STABILIZATION [Temperature ±1 C (1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs							Clear	Clear	clear	Clear	Clear			Color	7 3%) Jakes		ONE (ppm)	(ppm) (initial) ₋	MICROP	MICROP
VATER QU 1.8 F)							(36)	#7.7	80.1	0.72	0.36			Volume Purged (L)	>	6/2 (١	0.0	0.0	JRGE DEDIC	JRGE DEDIC
JALITY STABILIZAT Conductivity ±5% Turbidity 5 NTUs						1	1.74	_	3.09	2.	۲۵۰/			Pump & Tubing Volumes Purged		hi	1 1	(vented to)	(vented to)	MICROPURGE DEDICATED PUMP	MICROPURGE DEDICATED PUMP
BILIZATION ty ±5% 5 NTUs	X.((pp)	rive\Right W	ork\Field_Co	Ordinalia)	4	d Data	102	haat A	l l	0.18		Flow Rate (LPM)				3.0	0.0		

Page of

Fe+2 (ppm) WATER LE	1345	1340	1329	1326	1321	1316	<u>ر</u> ت	1306	19:35	Time	WATER COLUMN (feet)	STATIC WATI	SAMPLE I.D.	MONITORIN	PROGRAM NAME	DATE
VEL (ft btoc) AT TIN	Vacated well	SAMPLE	MELL DEN / ENO	1	1	1	1	Begin Purge	Arrived at well	Activity	lis)	STATIC WATER LEVEL (ft btoc)	V24PMW2C DUPLICATE I.D. / COLLECTION TIME	MONITORING WELL IDENTIFICATION		13 March 2006
Taken from I		21.32	ovo	21.10 23.5	17.36	15.05	14.20			Water Level (ft btoc)	210	10.77	LIAND THE		BLMP	2006
first bailer i		•	25	5.62		15.05 23.5	4.20 23.5	23.5		Pump Depth (ft btoc)		-	CATE I.D. / O	14-8	TRUP	SITE NUMBER
mmediately b		17.95	1	18.27	17.80	17.56	16.32			Temp (Deg. C)	MAIC	TOTAL WELL DEPTH (ft btoc)	COLLECTION	24-8MW-26	TRIP BLANK I.D.	
efore		2346 6.77 + 200	(1 1		2137	1519			EC (µmhos/cm)			TIME	26	Y24.	24
sampling. FILTER LOT #		6.77	1	656	6.52	656	6.59			pН	BAILER BOX#	23.9			124TB1217	
N		+ 200	1	6.hl	14.3	9.82	31.0			Turbidity (NTU)	# 20C				5	
		11.11)		11.78	13.25	18.03			Dissolved Oxygen (mg/L)	SAMPLER'S SIGNATURE		PID READING	PID READING	SAMPLING DEVICE	PURGING DEVICE
		203. 2	,			179.6	204.5			ORP (mV)	SIGNATURE		IN BREATHIN	PID READING IN CASING (ppm)	EVICE	VICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C (1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs		C Early	,	C	C	clear	مليحواء بالماواء			Color	the s	7	ONE (ppm)		DISPOSA	2" SUBM
WATER QI (1.8 F)		1	1	0.0	7.5	3.0	2.5			Volume Purged (gals)	رغ		0.0	0.0	DISPOSABLE TEFLON BAILER	ERSIBLE GR
UALITY STABILIZAT Conductivity ±5% Turbidity 5 NTUs		1	1	4.76	3.57	2.38	د آ	· 		Well Volumes Purged			(vented to)	(vented to)	N BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
BILIZATION ity ±5% 5 NTUs		1	1	0.5	0.5	0.5	20	0.5		Flow Rate (GPM)			0.0	0.0		[P

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telefax (805) 681-3100
Telefax (805) 681-3108

FIELD DATA LOG SHEET - PURGING

Page 1 of 2

DATE 13 1	MARCH 2006	6	SITE NUMBER	IMRER	74			ם ופיטואוט שם		2" SUBME	SIBLE GRU	2" SUBMERSIBLE GRUNDFOS PUMP	U
RAM N	ME BEND		TRUP	TRIP BLANK I.D.	V24TB1217	1218	7	SAMPLING DEVICE	FOR THE	DISPOSAB	DISPOSABLE TEFLON BAILER	BAILER	,
MONITORING	MONITORING WELL IDENTIFICATION	ION 	1-he	24-mw-26A	SA			PID REÂDINO	PID REÂDING IN CASING (ppm)		0.0	(vented to)	0.0
SAMPLE I.D.	V24 ~W26 A DUPLICATE I.D. / COLLECTION TIME	MADUPLI	CATE 1.D. /	COLLECTION	TIME			PID READJN	PID READING IN BREATHING	ONE (ppm)	0.0	(vented to)	0.0
STATIC WATER	STATIC WATER LEVEL (ft btoc)	10.94	TOTA	TOTAL WELL DEPTH (ft btoc)	H (ft btoc)	50.H	_						
WATER COLUMN (feet)	ЛN (feet)	39.46	(\$	CASING DIAMETER (in)		4		SAMPLER'S SIGNATTIRE	RIGNATURE	4	5		
WELL VOLUME(V) (gals)	E(V) (gals) ————	25.65	3 V (gals)	gals)	21	BAILER BOX #	206			1	50		
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	pН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
2160	Arrived at well												
0925	Begin Purge		50										1.0
0930	\ \ \	16.35	9	17.63	1270	6.21	23.8	14.25	150.6	Simily cloud	5.0	0.20	•
0835	3	20.26	50	18.25	425	7.11	20.5	10.40	150.2	straint cloub		0.39	Ø
0937	RAIX BEE S'	١	#	1	1	١	1	J	1	1	1	1	ō
2460	}	27.66	54	18.69	35%	7.22	32.0	10.72	P.74/	slight clove	20.0	0.78	7.€
0950	1	7804	54	18.64	165	7.08	30.4	(0.85	128.1		25.0	0.98	
0951	RAISE Rump 5'	,	40	1	1	1	1)	1])	1	1.0
0955	I	30.75	40	18.42	392	7.17	24.8	11.73	136.0	quels theils	30.0	- 17	1.0
080	j	34.20	40	18.75	628	6.78	19.5	12.02	145.5	7	35.0	1.37	1.0
1005	1	35.95	40	18.87	ති පු	6.62	18.9	12.40	152.1	CLEAR	40.0	1.56	1.0
1007 1	Lower Pump5'	1	45	١	(١	(١	١	1	١	1	1.8
1015	}	38.03	45	ાવા.	1198	6.22	٦.١	13.12	かんし	CLEAR	50.0	- 2 2	Tive\Fiel
3	Vacated welf							-					
Fe+2 (ppm) _		àken from fi	írst bailer ir	nmediately b	Taken from first bailer immediately before sampling	Ę.			 	PARAMETERS FOR WATER OUALITY STABILIZATION	ATER OUA	LITY STAF	NOITAZI IIE
WATER LEVE	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	E OF SAMI	PLING: _	46.73	FILTER LOT #	LOT #	2			Temperature ±1 C(1.8 F)	8 F)	Conductivity ± 5%	y ±5%
Comments:	Two page						_		•	рн ±0.1		Turbidity 5 NTUs	5 NI Us

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 95110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page 2 of 2

DATE	13 March 2006	2006	SITE NUMBER		24			PURGING DEVICE	VICE	2" SUBME	RSIBLE GRU	2" SUBMERSIBLE GRUNDFOS PUMP	
PROGRAM NAME	AME BLMP		TRUP	TRIP BLANK I.D.	V24781217	2187	,17	SAMPLING DEVICE	EVICE	DISPOSAE	DISPOSABLE TEFLON BAILER	BAILER	
MONITORING	MONITORING WELL IDENTIFICATION	NOI.		24-M	24-MW-26A	>		PID READING	PID READING IN CASING (ppm)	pm) (initial) <u></u>	0.0	(vented to)	0-0
SAMPLE I.D.	V 24 MW 24 A DUPLICATE I.D. / COLLECTION TIME	LA DUPLI	ICATE I.D. / (COLLECTION	TIME			PID READING	IN BREATHIN	ONE (ppm)	0.0	(vented to)	0
STATIC WATE	STATIC WATER LEVEL (ft btoc)	10.94	TOTA	TOTAL WELL DEPTH (ft btoc)	ГН (ft btoc)	50.4	T			J	7		
WATER COLUMN (feet)	1	39. 7	* `	CASING DIAMETER (in)	3R (in)	τ		SAMPLER'S SIGNATURE	SIGNATURE	1/	2		
WELL VOLUME(V) (gals)	ls)	25.65	3 V (gals)	gals) 76.95		BAILER BOX#	X# 206			Danis			
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	Hq	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
1	Arrived at well					1							
1	Begin Purge		I			1							1
1025		41.93	5 h	19.13	1132	6.37	34.8	13.03	167.9	slight clove	60.0	2.34	1.0
1034	Lower pungs!	(0.5)	1	,	f	ſ	1		١	1	0
1035		45.14	20	19.26	1533	છ.	23.9	13.17	192.3	حرصاء خاروا	70.0	2.73	1.0
1045	END PROCE / WELL DRY	MET I	XX	1	}	1)	1	١)))
1050	SAMOLE	46.73	1-	17.48	1530	6.24	6.24 27.2	12.30	8.712	حابها جلوراك	}	١	,
										- 1			
1055	Vacated well					1							
Fe+2 (ppm)	1	laken from f	îrst bailer iı	nmediately l	Taken from first bailer immediately before sampling	Ĭ,				PARAMETERS FOR WATER OHALITY STABILIZATION	ATER OII	AI ITY STAB	TA 71 11:
WATER LEV	WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	Æ OF SAM	PLING:	46.73	3 FILTER LOT #	LOT #	NA			Temperature ± 1 C (1.8 F) pH ± 0.1	.8 F)	Conductivity ± 5% Turbidity 5 NTUs	y ± 5% 5 NTUs
Comments:													

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page of

Fe+2 (ppm) WATER LE	1304	1300	1216	1215	1205	1155	1145	1135	1125	1115	1105	- Res	205	Time	WELL VO	WATER CO	STATIC W.	SAMPLE I.D.	MONITOR	PROGRAM NAME
Fe+2 (ppm) Taken from first baile WATER LEVEL (ft btoc) AT TIME OF SAMPLING:	Vacated well	Spampli	End Purce	(1	١	1	1	1	1	1	Begin Purge	Arrived at well	Activity	WELL VOLUME(V) (gals)	WATER COLUMN (feet)	STATIC WATER LEVEL (ft btoc)	D. V240 w268 DUPLICATE I.D. / COLLECTION TIME	MONITORING WELL IDENTIFICATION	NAME BEMP
Taken from ME OF SAN		23.00	1	55.94	55.00	52.49	49.42	43.40	40.30	30.60	20.25			Water Level (ft btoc)	36.73	52.5+00	11.89	2LB DUPI	TION	P
first bailer fPLING: _		1		89	68	68	63	89	68	89	68	68		Pump Depth (ft btoc)		(%)		ICATE I.D. /	24-1	TRIF
immediately 23.0		17.62		19.20	19.26	19.25	19.15	19.04	19.14	18.85	18.26			Temp (Deg. C)	3 V (gals) 110	(in) CASING DIAMETER	TOTAL WELL DEPTH (ft btoc)	COLLECTION	24-MW-26B	TRIP BLANK I.D.
before		1966		1164	1166	1149	1131	1152	1190	1188	1215			EC (µmhos/cm)	20	ER (in)	TH (ft btoc)	TIME	6	₹ 1
sampling. FILTER LOT #		6.30		5.84	5.84	5.88	5.90	5.89	5.86	5.73	5.85			рН	BAILER BOX#	4	68.	1		18 12 17
NA		4.51		0.82	0.91	1.01	1.21	1.13	1.07	4.99	1.85			Turbidity (NTU)	# 206		4			7
	1	11.76		10.78	JI. 03	11.36	11.18	10.99	11.76	11.19	13.(0			Dissolved Oxygen (mg/L)		SAMPLER'S		PID READIN	PID READIN	SAMPLING DEVICE
		257.9		200.3	204.8	200.6	196.5	188.4	200.	210.5	214.5			ORP (mV)		SAMPLER'S SIGNATURE		IG IN BREATHI	PID READING IN CASING (ppm)	DEVICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C (1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs		CLERE		clear	CLERR	CLEAR	CLEAR	chear	cheap	clear	Sligh Cloupy			Color	Downse	1.		ONE (ppm)		DISPOS
\text{\text{RS FOR WATER QU}} \text{\pm \text{\tint{\text{\tin}\text{\tetx{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\t		1		112.5	97.5	82.5	67.5	52.5	37.5	22.5	7.5			Volume Purged (gals)		2		0.0	0.0	DISPOSABLE TEFLON BAILER
IALITY STABILIZAT Conductivity ± 5% Turbidity 5 NTUs		1		3.06		2	1.84	1.43	1.02	0.62	0.21			Well Volumes Purged				(vented to)	(vented to)	V BAILER
BILIZATI ity ±5% 5 NTUs		1		1.5	1.5	1.5	ابح	1.5	2:1		5.1	1.5		Flow Rate (GPM)				6	o	

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page of

Fe+2 (ppm)	<u> </u>	0 00 51	3 Ihhi		\dashv			JY00	} W [1340 F	Time	WELL VOLUME (V) (gals)	WATER COLUMN (feet)	STATIC WATER LEVEL (ft btoc)	SAMPLE I.D	MONITORING V	PROGRAM NAME	DATE
	Vacated well	Sample	END PUTK		Reige Par		Para 1/2		Begin Purge	Arrived at well	Activity	E(V) (gals)	_	LEVEL (ft btoc)	ALLMYNY A	MONITORING WELL IDENTIFICATION	36A	90/11/6
aken from f		14.30		ינגא	4 5	25.05	מיט	30.40			Water Level (ft btoc)	S	- ×	10.61	DUPLI	NOI		
irst bailer ir		l			3		25		83		Pump Depth (ft btoc)	3 V (gals)	CASI	TOTA	CATE I.D. / (TRUP	— SITE NUMBER
nmediately		18.16		14.23	47.0	14 A	14.48	16.36			Temp (Deg. C)		CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	24-MW-278	TRIP BLANK I.D.	MBER
Taken from first bailer immediately before sampling		1631		1362	1361	1364	1364	1370			EC (µmhos/cm)	113.1 в	SR (in)	TH (ft btoc)	1	178	ובנו קדוינע	3
ng.		th')		ج د ج	?	ရှိ လ	7 80	28.5			Hq	BAILER BOX#	عـ	8.39	789m636		7	
		3.43			3	418	(2)	145			Turbidity (NTU)	# 106			/ 1310			
		N'N		0.38	0,40	055	0.7%	0.79			Dissolved Oxygen (mg/L)		SAMPLER'S SIGNATURE		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
		348		נגנ	5	77		-80			ORP (mV)		SIGNATURE		G IN BREATHIN	PID READING IN CASING (ppm)	DEVICE	SVICE
PARAMETERS FOR WATER OLIALITY STABILIZATION		(MY)		Clear	(1/4/2)	(last	(6-	Char			Color	M	11/2/11		ONE (ppm)	opm) (initial)	DISPOS	2" SUBN
WATER OU				1250	5	3	S S	0.34			Volume Purged (gals)	7	2	`	0.0	-	DISPOSABLE TEFLON BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
ALITY STAE				ברים ברים ברים	ر دو: دو:		1.83	0.66			Well Volumes Purged	i			(vented to)	(vented to)	BAILER	UNDFOS PUM
ITAZITIE				•		-		-	4		Flow Rate (GPM)				0.0	0.0		P

¢	Page
	_
	of
	_

PROGRAM NAME BAMP PROGRAM NAME BAMPLE I.D. VINMA BA STATIC WATER LEVEL (ft bloc) 14.0 WATER COLUMN (feet) 14.0 WELL VOLUME (V) (gals) 5.5			TRIP BLANK J J - N ATE I.D. / COLLE ATE I.D. / COLLE TOTAL WELL CASING DIA CASING DIA ON (gals) Pump	TRIP BLANK I.D. V34 TRIP BLANK I.D. V34 A 4 - MV - A 8A DUPLICATE I.D. / COLLECTION TIME TOTAL WELL DEPTH (ft bloc) CASING DIAMETER (in) CASING DIAMETER (in) S V (gals) 16.5 Total well depth (ft bloc)	VJVI J 8A TIME — TR (in) —	BA	VyTB1331 8A	161331 45.1 BAILER BOX # 306			PURGING DEVICE	PURGING DEVICE	PURGING DEVICE 2" SUBMERSIBLE GRUND SAMPLING DEVICE DISPOSABLE TEFLON BA PID READING IN CASINC (ppm) (initial) 0.5 PID READING IN BREATHING ZONE (ppm) (initial) 0.6 SAMPLER'S SIGNATURE MALL MALL MALL MALL MALL MALL MALL MAL
Act	ν	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp Jeg. C	EC ımhos/cı	pН		Turbidity (NTU)	Dissolved Turbidity Oxygen (NTU) (mg/L)	Turbidity (NTU)	Dissolved Oxygen (NTU) (mg/L)	Dissolved ORP (NTU) (mg/L)	Turbidity Oxygen ORP (mV) (mg/L) Color
אסס Arrivo Arrivo	Arrived at well Begin Purge		4				1 1 1						
רוגו		85.0K	-	14.04	1991	123	ائدا	+200	25.9		19.9	19.9	6.65 116.9 Claud
- Leve		13.95		ドルシ	3060	85.9	7	76.9	5	5	5.60	5.60 10.2 (6.4)	5.60 10.2 (6.4)
רצו		15.54		10.11	3055	3	بب	37.5	\	5.39	5.39	5.39 105.3 Chan	5.39 105.3 Chan 15.0 2
		30.50		10.39	₹07	6.3g	2	2.7	.s 4.73	(r.h	٥.٦٥١ (٢٠.١	٥.٦٥١ (٢٠.١	4.73 105.0 Clear 30.0 3
133		۲۲ وي		rej.	1927	(لاه	بد	1.5	1.1	4.91	4.91	H. 42 loy. 4 Clear	4.93 104.4 Class 25.0 1
CHC-		K.22	•	40.34	Lhse	17.		٥.٢٢	7.0 4.42	ky.h	J. 801 Ph.h	1.43 103.5 CHEA	4.41 103.5 Char 30.0
1243 End	2						1						
1515 SAMPLE	, ,	12.48	١	18.56	3426	th.9	2	94.9	4.9 5.71	1	5-71	5-71	5-71
1515 Vaci	_												
Fe+2 (ppm)	Vacated well											_	_
	'	en from fir	st bailer in	mediately t	Taken from first bailer immediately before sampling	άσ					PARAMETERS FOR	PARAMETERS FOR WATER QU	PARAMETERS FOR WATER QUALITY STABILIZATION

TETRA TECH, INC.
4213 State Street, STE 100
Santa Barbara, CA 93110
Telephone (805) 681-3100
Telefax (805) 681-3108

GROUNDWATER MONITORING WELL FIELD DATA LOG SHEET - PURGING

Page
-
e, L

DATE 111/06		SITE NUMBER	JMBER	ع			PURGING DEVICE	EVICE	2" SUBM	2" SUBMERSIBLE GRUNDFOS PUMP	INDFOS P	MÜ
PROGRAM NAME		TRUP	TRIP BLANK I.D.	IRCI BLARA	וננו		SAMPLING DEVICE	DEVICE	DISPOS/	DISPOSABLE TEFLON BAILER	BAILER	
MONITORING WELL IDENTIFICATION	TION	W - he	APE-MW-HE				PID READIN	PID READING IN CASING (ppm)		0.0	(vented to)	ગ ≀
SAMPLE I.D. VANNUA		CATE I.D. /	DUPLICATE I.D. / COLLECTION TIME	TIME	1 -	•	PID READIN	IG IN BREATH	ONE (ppm)		(vented to)	ق رق
ER LEVEL (ft btoc)	10.90	TOTA	TOTAL WELL DEPTH (ft btoc)	H (ft btoc)	45.8				<i>h</i> /	, ,		
1 .	35.0	CASI	CASING DIAMETER (in)	R (in)	سو		SAMPI ER'S	SAMPLER'S SIGNATTIRE	11/1 ₁₆₆ /			
WELL VOLUME(V) (gals)	17.5	3 V (gals)	gals)	İ	BAILER BOX # 106)OC		9	M.			1
Time Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)) pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	
1350 Arrived at well												
Regin Purge		ЧЧ										-
1881	12.14	-	18.77	الإي	6.47	+300	6.59	d'hb	المنابليل المومال	2.0	98.0	
1306 Rain puns	21.53	40	19.40	1589	6.00	90k+	(F.)	٩.١٤	Cloud	[#.O	<u>-</u>	
1311	4624	•	19.86	1500	5,99	ባወኒታ	ž	<u>ا</u> کوا د کا	Cloub,	15,0	₹ \$2	
1316 Raise frag	18.53	36	19.88	1598	28.2	1.56	6.36	38.3	Claub	20.0	2.50	
-	160	_	લ.૧ ૫	1616	5.13	66.0	6.33	145.4	Claud,	٥.٢٠	٨.38	
IW.	**	•	16.95	522	5	Se	6.22	ר.ראו	Cloub	30.0	2	$\overline{}$
THE TATE CREI												
7500 SAMPLE		,	(8.53	1613	6.30	645	6-32	21.0	elondy			
												
1505 Vacated well												$\overline{}$
Fe+2 (ppm)	Taken from first bailer immediately before sampling	rst bailer ir	nmediately b	efore sampli	ng.				PARAMETERS FOR WATER QUALITY STABILIZATION	WATER QUA	LATS YTIL	œ r−
oc) AT TII	Æ OF SAMI	LING:	1097	FILTE	OT#	1			Temperature ±1 C(1.8 F)	(1.8 F)	Conductivity ±5%	.≓. ⊦
Comments:	Loter Hall		いっしのたいからして	2	5	check value.	٤.		1, 0, 1		Turozuity	#I



Page _
, st
N

DATE		0	— SITE NUMBER	JMBER	1	44		PURGING DEVICE	VICE	2" SUBME	RSIBLE GRI	2" SUBMERSIBLE GRUNDFOS PUMP	70
PROGRAM NAME		BAMP	TRJP	TRIP BLANK I.D.	1x1	1/2/8/ DE1	2/7	SAMPLING DEVICE)EVICE	DISPOSA	DISPOSABLE TEFLON BAILER	N BAILER	
MONITORING	MONITORING WELL IDENTIFICATION	TION	×	- MM-T	30A				PID READING IN CASING (com)		o,) (verted to)	0.0
SAMPLE I.D.	V24 MW 30%	-	JCATE I.D. /	DUPLICATE I.D. / COLLECTION TIME	TIME	-	1	PID READIN	G IN BREATHIN	PID READING IN BREATHING ZONE (ppm) (initial) —	0.0	(vented to)	٥
STATIC WATE	STATIC WATER LEVEL (ft btoc)	8,64	ľ	TOTAL WELL DEPTH (ft btoc)	TH (ft btoc)	H	. 1			, 7 (•	
WATER COLUMN (feet)		36.2	CASI	CASING DIAMETER (in)	R (in)	7		SAMPLER'S SIGNATURE	SIGNATIJRE	46	Z	N.	I
WELL VOLUME(V) (gals)	ıls)	6.2	3 V (gals)	gals)	0	BAILER BOX #	# 205			MRC	2		
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C)	EC (µmhos/cm)	рН	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Well Volumes Purged	Flow Rate (GPM)
1042	Arrived at well					1							
1053	Begin Purge		44.5										49.7
65 0]		18.73	44.5	1898	4061	652	*3	X4X	-33.5	C/ear	8 6	0.80	_
101.3	Raise Aun	7	40.0										
1103		24.43	21.43 40.0	19.28	1884	6.26	84.2	3.92	3.93	Cloudy	10.00	1.60	
1108	Raise Au		35.0										_
1108		24,23	35.0	19.20	1831	820	/29	<i>\$6</i> %	-59.0	Cloudy	15.00	240	-
1109	Raise Dun!	V	30.0									1	\dashv
[[]3		27,27 30.0	0.0%	19.49	2/00	6.0	38.2	3.28	-65.5	Cloudy	20.00	2,20	
116	Mused	purga	/ K	Lowe	dwind .	Ť	14.	42.44			23.00	1	_
1/28	Resume	British	But	1								1	
1130		17.38	57th	14.88	4981	85-3	aott	6.92	7.3	Cloudy	25.00	400	_
1/35		23.56	444	19. 27	2244	6.12	82.3	41.5	-70.9	Condx	30.00	480	
antine	Vacated well											,	
Fe+2 (ppm) -		laken from 1	first bailer in	nmediately b	Taken from first bailer immediately before sampling	126			Į.	PARAMETERS FOR WATER OUGH ITY STARM IZATION	ATER OU	ALITY STAR	III IZATII
WATER LEVI Comments:	WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments: OBJETACOF	ME OF SAMPLING		had Ax	FILTER LOT	#	at ///k	×		Temperature ±1 C(1.8 F) pH ±0.1	.8 F)	Conductivity ± 5% Turbidity 5 NTUs	y ±5% 5 NTUs
OTHER PROPERTY.	2	シジン			ライン				1				

	ᆏ
52/12/0K	TETRA TECH, INC. 4213 State Street, STE 100 Santa Barbara, CA 93110 Telephone (805) 681-3100 Telefax (805) 681-3108

Page 2 of 2

Fe+2 (ppm) WATER LEV Comments:	/250					1230	1/38	1137		antio	Time	WELL VOLU	WATER COLUMN (feet)	STATIC WAII	SAMPLE I.D.	MONITORIN	PROGRAM NAME	DATE
Fe+2 (ppm) Taken from first baile WATER LEVEL (ft btoc) AT TIME OF SAMPLING: Comments:	Vacated well		ļ 			SAMPGE	END PI		Begin Purge	Constitution and at well-	Activity	WELL VOLUME(V) (gals)		STATIC WATER LEVEL (ft btoc)	SAMPLE I.D. V24MW3A	MONITORING WELL IDENTIFICATION	IAME BAMP	03/13/06
laken from fi E OF SAMI							pupae	25.04			Water Level (ft btoc)	6.2	36.2	100	1	NOL	3 7	,
irst bailer in						1	1	K5			Pump Depth (ft btoc)	3 V (gals)	CASI	TOTA	CATE I.D. /		TRUP	SITE NUMBER
nmediately befi						17.66		12.91			Temp (Deg. C)		CASING DIAMETER (in)	TOTAL WELL DEPTH (ft btoc)	DUPLICATE I.D. / COLLECTION TIME	44	TRIP BLANK I.D.	JMBER
- ore						1989		2236			EC (µmhos/cm)	(8.6 B.	ER (in)	TH (ft btoc)	TIME	24-MW-30A	V2478	12 pt
sampling. FILTER LOT # .					_	643		6.07			рH	BAILER BOX # 205	N	25	1	A	1/2/	
						176		39.1			Turbidity (NTU)	# 205		1	ì		17	
}					•	6.37		2.93			Dissolved Oxygen (mg/L)		SAMPLER'S SIGNATURE		PID READIN	PID READIN	SAMPLING DEVICE	PURGING DEVICE
						-478		1-1/2-			ORP (mV)		SIGNATURE		G IN BREATHIN	PID READING IN CASING (ppm)	DEVICE	VICE
PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1 C (1.8 F) Conductivity ±5% pH ±0.1 Turbidity 5 NTUs						Clear		douby			Color	J.	1000	1	ONE (ppm)		DISPOSA	2" SUBME
/ATER QU/ .8 F)							8.8	32.00			Volume Purged (gals)	1/2	3	\	0.0	0.0	DISPOSABLE TEFLON BAILER	RSIBLE GRU
ALITY STABILIZAT Conductivity ± 5% Turbidity 5 NTUs							8.3	5.16			Well Volumes Purged		かい	,	(vented to)	(vented to)	BAILER	2" SUBMERSIBLE GRUNDFOS PUMP
BILIZATION ty ±5% 5 NTUs						Log_S	100	1.00]		Flow Rate (GPM)					0		₹

		7	$\Big]$
03/13/2	Telefax (805) 681-3100 Telefax (805) 681-3108	4213 State Street, STE 100 Santa Barbara, CA 93110	TETRA TECH, INC.

rage_	7
İ	•

BAILER E PH	3478 1317 3	# 78 1217 66.6 BAILER BOX # PH Turbidity (NTU)	2478 1217 -///- BAILER BOX # PH Turbidity (NTU)	PURGING DEVICE SAMPLING DEVICE PID READING IN CASING (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) Oxygen (mV) Color (mg/L)	PURGING DEVICE SAMPLING DEVICE PID READING IN CASING (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) Ok. 6 SAMPLER'S SIGNATURE ORP ORP ORP (NTU) Color Color
TRIP BLANK I.D. V.47B TRIP BLANK I.D. V.47B TRIP BLANK I.D. V.47B A.4. AM - 31B DUPLICATE I.D. / COLLECTION TIME	TRIP BLANK I.D. 12478 13 14 - 110 - 318 TELD. / COLLECTION TIME	SITE NUMBER	TRIP BLANK I.D.	TRIP BLANK I.D. V2478 1217 TRIP BLANK I.D. V2478 1217 SAMPLING DEVICE	TRIP BLANK I.D. V3478 1217 TRIP BLANK I.D. V3478 1217 SAMPLING DEVICE 14 SAMPLING DEVICE PID READING IN CASING (ppm) PID READING IN BREATH ING ZONE (ppm) PID READING IN BREATH ING ZONE (ppm) PID READING IN BREATH ING ZONE (ppm) PID READING IN BREATH ING ZONE (ppm) PID READING IN BREATH ING ZONE (ppm) SAMPLER'S SIGNATURE Oxygen (mV) Color (mg/L) Color
134 78 318 -318 -318 -318 -318 -318 -318 -318	18 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	18 -1 - - - - - - - -	16	A	PURGING DEVICE SAMPLING DEVICE PID READING IN CASING (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN BREATHING ZONE (ppm) PID READING IN GRATHURE Oxygen Oxygen (mV) Color Colo
	NTU)			PURGING DEVICE SAMPLING DEVICE PID READING IN CASING (ppm) PID READING IN BREATHING ZONE (ppm) SAMPLER'S SIGNATURE SAMPLER'S SIGNATURE Oxygen (mV) Color (mg/L) Color	PURGING DEVICE SAMPLING DEVICE PID READING IN CASING (ppm) PID READING IN BREATHING ZONE (ppm) SAMPLER'S SIGNATURE SAMPLER'S SIGNATURE Oxygen (mg/L) Oxygen (mV) Color

EMAX Labs

SHIPPED TO:

TETRA TECH, INC.

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, inc.

SHIPPED TO:

TETRA TECH, INC. 4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

1835 West 205th Street

EMAX Labs

Torrance, CA 90501

Oしてのもつ CHAIN OF CUSTODY RECORD

PAGE 2 OF 2

DATE 3/6/06

24

	CLIENT	Vandenberg, AFB	_				A	ANALYTICAL METHODS	JV	Į Į	Ę	ý			12	V	┝	L		F		_
	DRO IFOT NAME	0,100	<u> </u>		\vdash	\vdash	Ė		\$ K	∦	<u> </u>	۶ 	-		w.	1/4	_			•	TURN-AROUND TIME:	
	DEO JEOT MANNE	LIMDa						ر الم	440	SQT					海	20,					Standard	
	TROJECI MANAGER	Kevin McNamara		æ				Ejə	71	 ידא/				'	jei	₩						
-	1C#	T99105-06	oineg	nilosi	-			w Z	ر ا	∀/S/	00			ッシン	hole.	in			S		OBSEDVATIONS/COMMENTS.	
	SAMPI FBS (Signatures)				sər				Λ u		工/1		əjte	9	S S	130	-		nəni		SERVATIONS/COMMENTS:	
	O Will Colonial Colon		_	_					ınıu L		Λŀ.	٠			1	75		əc	etno	əle	Clerko many const	
	× W W	6		_		-			hroi		9lt	나내			<u> </u>	/1.	əc		SO I	awt	Al, Sb, FF, Ch, Je,	
	×アイネイ			Pro	180	280 270	270	δiο	O 91		3/E:	G/L	ю <u>т.</u> я 0.	281	5 <u>123</u>	808	χŢ >	19uis	0 190	S PE	and TI only!	
	SAMPLE NO.	DATE TIME						9//9	8123			928 <u>:</u> 38K			s m	ľγ	kintsN		լաոլ	ere iltere	•	
13	1/99 W				+	+	+	\geq			+-	_	+	-	1	Ś	<u>2</u> الا	+-	٧	オ⋝		
6) 	7	T	\vdash	>					\dagger	+	+	>	2		-	_	- ř.	4		
		(151)		1	+		_	\Box	_		+	\dashv		1		X.	-	O	14			<u> </u>
4	124 MUZE	J (570				•	:	\overline{x}						•				d	-	V		,
				-			<u> </u>					\vdash		_	ļ		-		•	T		
				+	+	+	1	I		+	+	+	\perp	+	1	-	+	-			7/64	
			\parallel	\dashv_i	+	+	\perp		\top	+	\dashv	_		\dashv	[,	
					\vdash	1	$-\!\!\!/$															
	•									1			P	_				_				
				+	+	+	1		\dagger	\dagger	+	*	#		1		\perp	-		†		_
				+	\dashv	\dashv				\dashv	\dashv		<u>'</u>		A							
												·				<i> </i>	/	/				
					_	 _	_				-		1					ļ		/		
	×	CONTAINER TYPE:	ပ	- °	Glass	-	_	R	PRESERVATIVES	TE S	VES:	-	-	4			4			7		
	TYPE: W = Water		m	S) (I	Stainles	ess Steel	99	Alls	All samples are preserved at 4° C.	es ar	e pre	serve	dat,	ф О							TEMPERATURE PCANK FACH COOLED: VEC NO	
	RELINQUISHED BY:	SIGNATURE/			lastit			wat	er sa	i Die	are	pres	yved	as ir	dicat	Water samples are preserved as indicated on the sample labels.	he sa	mple	labels	ن		
	~	4 10	-1				12	TETRA TECH, INC.	TEC	Ĭ Ĭ	ပ		A %	A FIE	1/2	~5	Σ F	Ø	D	-	TOTAL NUMBER OF CONTAINERS	
	RECEIVED BY: A GALL CAL	SIGGATURE			O	OMPANY	χ Σ	D	ENT	X			Δ	DATÉ:	7	8	TIME		130		METHOD OF SHIPMENT	
10	RELINQUISHED BY: A. GALLICLA	Signature			Ö	COMPANY	<u>\</u> ∑.:	1	EMAX	X			ă	DATE:	1/	1/06	TIME		1455		SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:	
23	TNDRA PATE	SIGNATURE	K	#	Ĭħ.	COMPANY	₹	1,5	{	X			₩,	DATE:	~	7	TIME:		2 1	П		
			\downarrow		1		7		5		X	1	1		1	2	-	1		1		

only one Diesel Amber SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS: TEMPERATURE BLANK EACH COOLER: KES NO OBSERVATIONS/COMMENTS: CHAIN OF CUSTODY RECORD TOTAL NUMBER OF CONTAINERS TURN-AROUND TIME: METHOD OF SHIPMENT PAGE Standard 8 13 080290 3/7/06 Filtered Sample 7 1130 Water samples are preserved as indicated on the sample labels. 2 1130 Number of Containers 705/ 2051 U এ 2 ₹ Z Δ থ্য 2 S Container Type 3 3 3 3 3 ζ 2 ≥ 3 Matrix Type DATE: 78/08 SM BOBILSM RIHLA DATE DATE: 78/06 0 X P. All samples are preserved at 4° C. 6 10) 24 E376.2 Suffde ANALYTICAL METHODS SITE PRESERVATIVES CLY XX E323.3/E415.1 N / TOC **IETRA TECH, INC.** ANA X E300/310.1/160.1 CL/S/ALK/TDS e Max 7470 / 7471 Metals 1835 West 205th Street Torrance, CA 90501 HOLY Dioxane X X X Stainless Steel COMPANY COMPANY COMPANY SW8270 SVOCs Plastic Pesticides $\frac{\mathbf{X}}{\mathbf{X}}$ X $\frac{X}{X}$ 11 SW8260 Volatile Organics SS P 75-127 0801 1450 0221 1225 31764 1425 1430 SSH HSS 350 1635 1355 TIME E = Encore CONTAINER TYPE **IETRA TECH, INC.** 1213 State Street, Suite 100 Vandenberg AFB Santa Barbara, CA 93110 Phone (805) 681-3100 T99105-06 Kevin McNamara BIB BGMP -AX (805) 681-3108 SIGNATURE B12 SD = Sediment SAMPLE NO. W = Water Sack V 24 PMWSF VZY MWSBF 人、の本つころな V24 PMW3F S = Soil VZY MWSAF Blo V24PmW4F A. GALLELA SAMPLERS (Signatures V24 Pmws V24 mwsA V24 mwsB V24 PMW4 VZ4Pmw3 PROJECT MANAGER 0×4 PROJECT NAME ELINQUISH 7 MATRIX FYPE: CLIENT 3 1003

EMAX Labs

SHIPPED TO:

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

Tt-IRP-009 (04/26/05)

TETRA TECH, INC.4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

1835 West 205th Street

EMAX Labs

SHIPPED TO:

Torrance, CA 90501

SITE

 $\frac{\partial \mathscr{L} \mathcal{L} \circ \mathcal{B} \, \mathcal{O}}{\text{CHAIN OF CUSTODY RECORD}}$

24

DATE 3/7/06

PAGE 2 OF >

				l											Į						
	CLIENT	Vandenberg, AFB					•	ANAL	YTIC/	L ME	ANALYTICAL METHODS	တ္								TURN-AROLIND TIME	
	PROJECT NAME	BGMP			\vdash	<u> </u>		a virely	\vdash	SC	-			(u	-	do					
٠	PROJECT MANAGER Kevin M	Kevin McNamara		\$	-				CUC	K/II	······································				7V √11	10/a			····	otanuard	
	TC#	T99105-06		sojnet	ноз			۱ <mark>۰۲۱</mark> ۱۲۹۱			00			PJ'5	<u>1,162</u> √ 16¢	na				ODOCEDYATIONIC/ONANGENTO	T
	SAMPLERS (Signatures)					00-)1 / N		əţe		ACT)	Alk		•*anig	Helur	OBSERVALIONS/COMMENTS:	
	X M. X			litelo	ieseic estici		OOC	0272	uimon	091/1	11.31	əbill	rchlor	(A);	∋ છે. ક	18WS		Lype Type			
	× Ingolulus					1 S80	2 07S	<u> </u>				071 uS S.			डावर १०४	•	qyT x	iner Jo hac	eS be		
	SAMPLE NO.	DATE	TIME				8WS	8W8 9WS	_			E376 RSK									
*	V24TB 211	3/7/06	0800	X				r ·					1			1	1_	-	├		
13	V24 PMW13	-	14.10	X									!				3	5	0		
10	V24 PMW13F		1415										_	×			3	٩	>	The second secon	
1/2	V24 MW 13B		1230	X	V												×	66		TOTAL CONTRACTOR OF THE PROPERTY OF THE PROPER	,
S			12.35											×			3	2	<u> </u>	3	3
2	V24 PMW22		1345	×	V										Y		3	6.2	-	- TANKS	
11	V 24 PMW 22F		1350											メ			3	٦	^		
90	V 24 MW 22B		1020	X	X	_					•						3	7	9		
67	V24 MW 22BF		1625											×	- '		M	7	<u>></u>		
20	V 99BEB20S	→	0900	X	J		$\overrightarrow{\times}$	$\frac{2}{\lambda}$							X	X	3	5	₹	Number of Gottoine : K	
	ē	CONTAINER TYPE:		ອິ	11 II	Glass Stainles	ess Steel		RESE	PRESERVATIVES	IVES:	Jayras	PRESERVATIVES: All samples are preserved at 4° C	(TEMPERATURE BLANK	
	neu	E = Encore			<u>a</u>	Plastic		- 1	ater s	ample	sare	prese	rved a	Water samples are preserved as indicated on the sample labels	ated c	in the	samp	le lab	els.	EACH COOLER: YES NO	
	め	SIGNATURE		1.		-		Ш	A TE	TETRA TECH, INC.	<u>ပ</u> ဲ		DATE:	A	7		TIME:	TIME: //30		TOTAL NUMBER OF CONTAINERS	
		SIGNIATORE	,			8	SOMPANY:		EMAX	S.			DA A	200		8	TIME	130	1	(i)	
	RELINGUISHED BY: A. GALLOLA					8	COMPANY	l ~	CNAX	X			DATE	3/5	+ /		TIME:	1508	1.	SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:	
Ø.	RECEIVED BY: SIGNATU	ATURE W				8	COMPANY:	X R					OATE:	00	0			ME: /S0 6			

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

TETRA TECH, INC.4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

1835 West 205th Street

EMAX Labs

SHIPPED TO:

Torrance, CA 90501

 $\frac{\partial \mathcal{L} \mathcal{L}_{\mathcal{O}} \, \mathcal{B} \, \mathcal{O}}{\text{CHAIN OF CUSTODY RECORD}}$

31716 DATE

2

SITE

PAGE OF

<u>~ 1</u>	CLIENT	Vandenberg, AFB	g, AFB						ANAL	YTIC/	AL ME	ANALYTICAL METHODS	S								<u> </u>	TURN-AROUND TIME:	
6 1	PROJECT NAME	BGMP	Ω.								SC	_			T,U	-4/(2						Standard	
7	PROJECT MANAGER	Kevin McNamara	ra				 .		0,04	SIRI	רא/עו				6264 1,364	(v 14	1374 1370						
<u> </u>	TC#	T99105-06	90-		<u> </u>	nilosi			-11 12		∀/\$/\	00.			6) ed					s.	ō	OBSERVATIONS/COMMENTS:	
(A)	SAMPLERS (Signatures)			i				s(), C	T/N			15'18 17319	12521							
X	W.	,						OOVS			91/1	1.311	əbilli	oldon	2 9						aiduir		
×	WAS Y	Jarre			0978	8084 F	1 2808	3270	30728) 0108 3.6 CP	.015\0	53/E4	18 Z.8	9d 0.t	30109	3012 B	SIOS	qγT x	ainer	ber of	es pa		
	SAMPLE NO	NO.	DATE	TIME				8WS			E300										1918.4		
	V99W630		317/06	1600	$\stackrel{\bigcirc}{\times}$	abla		X									$\langle \rangle$	3	-	1_			
	V99 W630F		-	TEOS											X	-		2	ے			, Aller	
	Vayrani			IMO	X	X		X								\Diamond		7	گ	=			
	VAYPMUIF			1145											X	}	-	>	<u></u>				
	NYMMAA		 -	1430	X													3	ۍ	-	-		
	VAYMWAB			2441	X							ļ			(B			3	ۍ	-			
,	ALLWARD	4	_	1635	X										X	X		3	ۍ	و ا		No METALS ANALYSIS	
- 1	VIN MU JAK			1640											X			3	هـ				
,	VAY MW 3B			1540	X							ļ <u>-</u>				V		3	ن	۰			
	N.S.		Ş	ISYS											X			3	م				
_	MATRIX $S = Soil$ TYPF: $W = Weater$	_	CONTAINER TYPE:		ပ္ မ	. I	Glass	Č		RESE	PRESERVATIVES:	IVES:			(┨	TEMPERATI IRE BI ANK	
		ЭE	E = Encore				Starrilles	Startiless Steel		ıı sam /ater s	pies a	All samples are preserved at 4° C. Water samples are preserved as indicated on the sample labels	served	ant 47 rved a	s indį.	cated	on th	e sarr	ple la	bels.		EACH COOLER: VE NO	
Y.	RELINGUISHED BY:	SIGNATURE	L	V					TETF	SA TE	TETRA TECH, INC.	<u>ੂ</u>		DATE:	10	2		TIME	3	23	<u> </u>	TOTAL NUMBER OF CONTAINERS	
י או	RECEIVED BY:	SIGNATING	0	ſ			Ö	COMPANY		KYMET	x			DATE	, ,	(N)	20	TIME	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	٥	ž	METHOD OF SHIPMENT	
DC.	RELINQUISHED BY: A. G.M. L.I. C.I.W.	SIGNATURE		-			Ö	COMPANY		EMAX	X			DATE	7	00	90	TIME.	1506	NO.	12 S.	SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:	
ILE.	RECEIVED BY:	SIGNATURE	15				00 ,	COMPANY	MPANY:	>				DATE:	0	79		TIME >	AE:		Т		
							_			,)	c	>		: 	,	ı.	_		_

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

SHIPPED TO:

TETRA TECH, INC.4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

1835 West 205th Street

EMAX Labs

OGCOBO CHAIN OF CUSTODY RECORD PAGE 2 OF 3 DATE 317/06 SITE Torrance, CA 90501

Vandenherg, AFB Vandenherg, AFB Vandenherg, AFB SAMPLE NO. SAM				Т								7						/	Τ		T		
Salvicenderg AFB NAMAMGER Rewin McNamera T199/105-06		LORRA-AROUND LIME:	Standard	OF INTERNATIONAL STATE OF THE S	OBSERVATIONS/COMMENTS:					The state of the s			i.						TEMPEDATI IDE DI ANIV	EACH COOLER: (YES) NO	TOTAL NUMBER OF CONTAINERS 7 07 54	METHOD OF SHIPMENT	SPECIAL SHIPMENT/HANDLING/STORAGE
Vandenherg, AFB Vandenherg, AFB Vandenherg, AFB SAMPLE NO. SAM					6	əjdwi	e2 bə	Filter		X	_									Ś		۵	
Vandenherg, AFB Vandenherg, AFB Vandenherg, AFB SAMPLE NO. SAM			 		nənist	Con	to 19d	lmuM	ڡ					<u> </u>						labe	<i>[''</i>]	130	
Sample S									1	ļ			ļ			ļ	_			mple		-	TIME
Sample S						ə	qyT x	intsM	7	9	-		<u> </u>	ļ	₩	<u> </u>	<u> </u>		ł	he sa	É		1
Sample S		\vdash									<u> </u>	<u> </u>			H		ļ		1	i on t	J	30/8/	3
Sample S		\vdash	7313	ig r	v HJ	<u> </u>	Solz	32	X										1	cated	Ś	3	1
Sample S		ŢŲ.						_		X		-			1		 		1	s indi	6	W	1
Sample S			3,71	WALV					 	/									1	at 4° ′ed a<	DATE	DATE	DATE: /c / o "
Sample S	•					əpiji	nS 2.8	E376												rved eser			
Sample S	SOC						971	B SK											:	orese			
Sample S	Ţ	_			•								ļ	\parallel					\TIVE	are policy	S S	X	
Sample S	AL M	S	K/TD:						_			<u> </u>						_	∃RVA	nples	ÜH,	Z,	2
Sample Signatures Signatures Sample Sa	YTIC	\vdash	יפוס										<u> </u>		-		-		RES	ll san ⁄ater	≝	1	1364
Vandenberg, AFB CT MANAGER Kevin McNamara T199105-06 T199105-06 T199105-06 T199105-06 T199105-06 T199105-06 SAMBORD POSITION SAMB	NAL	\vdash	əlet															-	1		l <u>iu</u>	ļ ⁻	`
ST NAME ST	∢	_																•		Stee		ANY	COMPANY:
ST NAME ST NAME ST NAME STANDER STA													\Box		<u> </u>				· δ	ness tic		COM	SOM
SAMPLE NO. SAMPLE					səpic	oitsə	T 1808	8MS											Glas	Stall			
SAMPLE NO. SAMPLE			6	anilo															Į.				
SAMPLE NO. SAMPLE		_	1	1 soins	I Org	ijelo\	۱ 09Z	8WS	$ \mathbf{X} $			_	 _						တ ဒ	ο S	.		
Vandenberg ST NAME ST NAME T 199105- T 1991								TIME	1630	1635												1	į
Vandenberg ST NAME ST NAME T 199105- T 1991	FB FB				·			DATE	17106	ج.	4	1							TYPE:	: Encore	77		
ST NAME ST MANAGER SAMPLE NO. VANAGER Kevir SAMPLE NO. VANAGER SAMPLE NO. SAMPLE N	₹g, A	¶₽	ara	5-06				dash	<u> </u>			_							NER.		V	X	ľ×
ST NAME ST MANAGER SAMPLE NO. VANAGER Kevir SAMPLE NO. VANAGER SAMPLE NO. SAMPLE N	lenbe	BG	Nam	9910)												NTA				SIGNATIBRE
ST NAME ST MANAGER SAMPLE NO. VANA631 VANA641 SERVINGER SER	Vanc		in Mc	-			ス												8		IGNA		S S S S S S
SAN VANNE SAN VA			ş								i									nent	S	<u>ω</u>	S
SAN VANNE SAN VA							\$	일	.										ie -	Sedir		4	
SAN VANNE SAN VA			l œ		Ires)	\leq	\ \	APLE	31	3.	1								S = S	v - v	i,	2	111
PLERS (SI NAT NAT NAT NAT NAT NAT NAT NAT NAT NAT		1 4	IAGE		gnatu		H	SAN	3	100									: ری ا	1	;; ;	22	BY:
RIX RIX (Sauls)		NAM	MAN		S (Si	N. Comments	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<u> </u>	1	5													
141777 CH T T H H H H T T T	⊨	ECT	ECT		LER	1	1 2 5	 											<u>×</u> .		QUISI	٠, ص	INQUISHED BY:
CLIENT CL	CLIENT	ROJ	Į Š	#	AMP						!								MATRIX TVBE:				RELIN
	U	10	10	<u>, </u>	၂ တ	<u> </u>	<u> </u>	<u> </u>	7	<u> </u>		<u> </u>				I	J		<u>-</u> F		<u>ı. </u>		œ

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

DATE: 7/8/06

1006

ENDX

1051

OBSERVATIONS/COMMENTS: $\frac{\partial \mathcal{L} \subset 9\,o}{\text{CHAIN OF CUSTODY RECORD}}$ TURN-AROUND TIME: PAGE] Standard 90/8/ Filtered Sample 4 Number of Containers 7 D <u>0</u> P 0 Container Type b 2 Advitix Type DATE ebillu2 S.aYSE ANALYTICAL METHODS 32K 175 SITE E323'3/E412'1 N / TOC E300/310.1/160.1 CL/S/ALK/TDS IV muimordO 8.81SE SW6010 / 747 / 0747 / 0103W2 1835 West 205th Street Torrance, CA 90501 **EMAX Labs** SV(8015 DieseP) 😪 SW8260 Volatile Organics 1320 1355 SHIPPED TO: 13.10 130 1400 3/8/06/08/00 1315 TIME V620 (-0-8) **TETRA TECH, INC.**4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (895) 681-3₁08 DATE Vandenberg, AFB T99105-06 Kevin McNamara BGMP PMW 10 るとから MWSAZ となるのでは 22 873 MUSA SAMPLERS (Signatures) PROJECT MANAGER PROJECT NAME CLIENT #5<u>+</u>

CONTAINER TYPE:	= Glass PRESERVATIVES:	X	
SS = SS SD = Sediment E = Encore P = P RELINQUISHED BY: SIGNATURE: Transeca. From the second of the second	ss Steel	All samples are preserved at 4° C. Water samples are preserved as indicated on the sample labels. DATE: DATE: 3/9/04 1105	TEMPERATURE BLANK EACH COOLER: (YES) NO TOTAL NUMBER OF CONTAINERS
	COMPANY: ENAX	DATE: 79/06 TIME: 05 DATE: 79/06 TIME: 440	METHOD OF SHIPMENT COLATION SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:
TODRA PATEL SIGNATURE TOLL	COMPANY:	DATE TIME 440	

のからかし トンスいい のとなみ トンスコイクラント

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

Tt-IRP-009 (04/26/05)

TETRA TECH, INC.

4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

#31

1835 West 205th Street

EMAX Labs

SHIPPED TO:

Torrance, CA 90501

OG CO3 OCHAIN OF CUSTODY RECORD

8 MAR 2006 PAGE 1 DATE 7 SITE

SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS: TEMPERATURE BLANK EACH COOLERY YES NO OBSERVATIONS/COMMENTS: TOTAL NUMBER OF CONTAINERS TURN-AROUND TIME: METHOD OF SHIPMENT Go St. 188 13 contrainers Standard Filtered Sample × X 1 a 3 TIME; 440 ada control 105 Water samples are preserved as indicated on the sample labels. £ € € <u>ম</u> ড ي 18 G <u>| 1</u>| <u>| 1</u>| 1 **Number of Containers** J a P Ð Container Type 3 3 3 eqγT xintsΜ DATE 3/9/06 DATE: 3/9/06 SW 8015 Hethranol SA, ⁴⁸, ¹⁸ 0103 WS 3-6-8 3/9/06 SWBOIS GESOLING All samples are preserved at 4° C. easterohorate ebilius S.atfa ANALYTICAL METHODS PRESERVATIVES E323.3/E415.1 N / TOC TETRA TECH, INC. 行れれど FRAX COMPANY: SIM5010 1747 \ 0747 \ 0108WS Stainless Steel COMPANY: Plastic Glass SW8260 Volatile Organics രയപ BHARGE 1440 いせける S1日 13.55 0851 1465 8 TIME 1325 E = Encore Vandenberg, AFB T99105-06 Kevin McNamara BGMP W = Water SD = Sediment SAMPLE NO. Francescalerrell INDRA PATEL A. GACLO! A R.CHUCUM S = Sol SAMPLERS (Signatures) インスを見ると N STAPA MB CA VUHMWBAF PROJECT MANAGER VZ4PMWB V24PIW82 799W632 く24 まちょう VZYPIWBİ PROJECT NAME CLIENT MATRIX TYPE

ζd

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:

TIME: 1440

DATE: 3/10/06

EMAX

COMPANY:

FNBX

2 2 1

イクシカ

1003

COMPANY:

DATE: 710/02 2/10/06

EMX

COMPANY:

GHUCIA.

Fanceso RECEIVED BY:

ELINQUISHED BY

RELINQUISHED BY:

OTAL NUMBER OF CONTAINERS

METHOD OF SHIPMENT

1:1007

TETRA TECH, INC.

SHIPPED TO:

TETRA TECH, INC.4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

1835 West 205th Street

EMAX Labs

Torrance, CA 90501

2 SITE

DATE 3/9/66

OG CO98 CHAIN OF CUSTODY RECORD PAGE 2 OF 2

CLIENT Vandenberg, AFB	erg, AFB			√	ANALYTICAL METHODS	ICAL M	ETHO	SO			1]		TUR	TURN-AROUND TIME:
PROJECT NAME BGMP	MP					SC			\ -7	1/4						Standard
PROJECT MANAGER Kevin McNamara	nara	. s	···		stals	ראידו			> [()						Stational
T99105-06	05-06	sineg solin a			∍W L2					/ 				s	C	OBSEDVATIONS/COMMENTS.
SAMPLERS (Signatures)								əţ		- (SE)	96		əd			
Mak not	9	10V 03S8 9015 Die	8087 Peg 8082 PC	VS 0728	MIS 0728	0.6 Chro	9:3/E418	. ۱۲5 5.2 Suffic	tone9 0.4	0109	31081	x Type	ainer Tyl	O to ted prices be	na ogud	
SAMPLE NO.	DATE TIME						E39			() ()	'ካ/	nteM			12111	
24 MUIG BF	3/4/66 1250			-	-	_		ł	+	 		<u>کے۔</u> ا		<u> </u>		
24 PMW 18	0511 [,	Y X) <u> </u>	0	3		7
24 PMW181-	55)11	-								 						
124 MW21B	1400	<u>×</u>	-							<u> </u>	-		৩	9		*
24 MW21BF	50h!	-	_							×			٥	-		
24PMU21	0/5)	メ											9	وي		
VZUOMUZIE	(3/5)							-		×				-	V	
24 MU20B	1425	メ			·					•			Ó	100	3	als. I continued the
24 MW 20 BF	1430									×			Q			*
		+		\downarrow	-	1		-		_	1	`		+	\downarrow	
MATRIX S = Soil CONTAIN TYPE: W = Water	CONTAINER TYPE:		Glass	7	PRE	PRESERVATIVES	TIVES									TEMBEDATI IDE BI ANIV
	E = Encore	11 ti	Stainles	Stainless Steel Plastic	All sa Wate	All samples are preserved at 4° C. Water samples are preserved as it	are pre	eserve(dat 4° rveda	o. S india	All samples are preserved at 4° C. Water samples are preserved as indicated on the sample labels	the s	- ajum	alade		EACH COOLER: YES NO
RELINOUISHED BY:			ŀ							?	5	3	2	S S S		

9
Ξ
ž
S
2
Ξ
g
₹
۵,
α
7
Ë

SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS: 2 YESI OBSERVATIONS/COMMENTS: **CHAIN OF CUSTODY RECORD** ㅂ Ō EACH COOLER:, TURN-AROUND TIME: METHOD OF SHIPMEN COURIER PAGE 000115 Standard アル 3/10/06 Filtered Sample 120p Water samples are preserved as indicated on the sample labels. TIME: 1400 <u>v</u> 0// Number of Containers 4 ٥ Ø O **D** 0 ٩ Vatrix Type DATE: 13-06 DATE: 3-13-06 DATE harchis 2006 All samples are preserved at 4° C. ANALYTICAL METHODS SITE PRESERVATIVES E323.3/E415.1 N / TOC ETRA TECH, INC. FRIKK BNAX 大ダングリ SM6010 / 7470 / 7471 Metals 1835 West 205th Street Torrance, CA 90501 Stainless Steel **EMAX Labs** COMPANY COMPANY COMPANY Plastic SW8260 Volatile Organics 1155 |X SHIPPED TO: 700 1250 105 010] 012 245 TIME 3/10/06/0500 1315 E = Encore 4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108 DATE Vandenberg, AFB 7501 T99105-06 Kevin McNamara BGMP *IETRA TECH, INC* J S M M J M S K AN 1513 SD = Sediment 124 PMW11F 24 MW 14 B 24 MW4BM W = Water SAMPLE NO. AT MULKA 4. 公本しつな -range Perrell STATE OF 124 AWUR 当ののは 124701215 A-GHLUGUM MWD HZ SAMPLERS-(Signatures) PROJECT MANAGER PROJECT NAME ELINQUISHED BY ECEIVED BY CLIENT PE #2

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

205.8 × / (*

2) T= 3.0°C

Ø

B

Tt-IRP-009 (04/26/05)

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

SHIPPED TO:

TETRA TECH, INC. 4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

1835 West 205th Street

EMAX Labs

Torrance, CA 90501

CHAIN OF CUSTODY RECORD

PAGE OF 3	TURN-AROUND TIME:
30/01/2	F
DATE	
Iorrance, CA 90501 SITE 24	ANALYTICAL METHODS
0015-100 (500) 07-1	Vandenberg, AFB

CLIENT	Vandenberg, AFB		ANA	ANA! YTICA! METHODS	THOUS			H	
PROJECT NAME BG	ВСМР			S		(A)		<u> </u>	TURN-AROUND TIME:
PROJECT MANAGER Kevin McNamara	mara					24 24 24 24 24 24 24 24 24 24 24 24 24 2			Standard
TC# T991	T99105-06	ganica eoline			00	1050 12- 24	S		OBSEDVATIONS/COMMENTS.
SAMPLERS (Signatures)		vo √		IV mu	1 / N	95 95 95 95	ajner		POENVA I CINO/COMMENTO:
R N	P	eseic oitse	200s	imon) 01	Ĺype	əldu	
x Jacole Che.		7 0928 3042 E 3083 E	S 0758	010°	43/6.8 175 175	109 (109 (ayT x iner oer of	s2 bə	
SAMPLE NO.	DATE TIME	BWS	8WS	EZ18	BSK	75	quoc	netli-	
9 V24 MWISBF	3/14/06 1110		 			X	0	×	
10 V99W633	1 1300	×					991	<u> </u>	
11 V99W633F	7,05	-				>	10	×	7700
12 V24MW/7B	1000	×					75/		T
13 VALMWIABE	1005					×	<u>a</u>	×	
14 V24 DMW19	1350	×				*	48	7	Only 31/2 As VOC College
15 V24 PMW 19F	(35\$					×	7 4	×	
.>	12.50	X					9 9		
オスク	1255					×		×	
4 MW 23B	×001/ ↑	X					クセグ		
	CONTAINER TYPE:	G = Glass SS = Stainle		PRESERVATIVES: All samples are preserved at 4° C.	VES: e preserved	at 4° C.		1	1 5
SD = Sediment	E = Encore	ıı	Plastic	Vater sample	s are preserv	Water samples are preserved as indicated on the sample labels.	sample labels	ė.	EACH COOLER: (FES) NO
	4 Mary Comment		叵	TETRA TECH, INC.	ပ	DATE: March 13 2006	TIME:	7	TOTAL NUMBER OF CONTAINERS
1. M		20		EMAX		DATE: 3-18-06	TIME; 110		METHOD OF SHIPMENT (D) (C) (C) (C)
July H	The state of the s	<u>8</u>	_	FRAX		DATE: 3-13-06	TIME: 1 400		SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:
SIGNATURE: A - FIDRALIOO	E. Hal	S	COMPANY	ENEX		DATE: S-B-O6	TIME: 14CB	8	
		·							

TETRA TECH, INC.4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

CLIENT

1835 West 205th Street

EMAX Labs

SHIPPED TO:

SITE Torrance, CA 90501

CHAIN OF CUSTODY RECORD

03/10/06 PAGE 3 OF 3	THE PROPERTY OF TAKEN	TURN-AROUND TIME: Standard										
3/10/		-			3L6							
S		•			_							
DATE												
केट		P	(^!uo ```\${}	19								
SITE	THODS			၁င)T							
	AL MET	SC	CL/S/ALK/TDS									
201	ANALYTICAL METHODS		eletaM 171									
, CA 90	₹											
Torrance, CA 90501			5									
			ics									
901	Vandenberg, AFB	BGMP	Kevin McNamara	T99105-06								
8015-100 (coo) Vari	Van		Kevin M	•								
-		ME	NAGER									

								Τ "	7		T			T	1	1		7		1			
THEN ABOUND TIME.		Standard		OBSERVATIONS/COMMENTS:							99	Pulse spanis	T						TEMPERATURE BLANK EACH COOLER: RES NO	TOTAL NUMBER OF CONTAINERS	~]	SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:	
					əldu	s2 ba	eretii	∮ ×		X			X			I]	<u>v</u>	<u>,</u>			/E:
				ainers	Conta				- 7		4		<u> </u>				1.		a de		0/1	0	
						Tenír			D	7	P	4					<u> </u>	_	elum)	TIME	TIME:	TIME:	ij
	Т					qyT >	cintel	<u> 3</u>	-	-		-	<i>→</i>		H	 	-	1	h S	É	₽	Ħ.	TIME
								-	<u> </u>	 							-	-	ļ	Ì	DATE: 3-15-06	9	
										<u> </u>	<u>-</u>						_	1	cated	DATE:	W	1, W	ii.
	(p)	() Fe	1 7	35	1) 0/	91	75	×		X			X	·	I		-		S. indi	2	l ii (x	1. V	ļ.,
				eje.	rchlor	9d 0.	#16Ξ	3					- 5.						All samples are preserved at 4° C. Water samples are preserved as indicated on the sample lahels	DATE:	DATE	DATE: 3-13-06	DATE
^					apyl	uS S.		-						\int	-				pexe.				
מיסבין יוער יועריי							SK Second							1				i.Si	prese				
-		7101			115.1									+				\ VI	are ples	NC.	4	X	
- - -	3	אנידר			1/160 1/160									\vdash			1	PRESERVATIVES	npfes	TETRA TECH, INC.	ERAK	EWAX	
<u>.</u>	-	slet			0747			-					-{				ļ	RES	vil sar Vater	₹	1	1	
					d Mis			! 										1		TĒT			l
		,		s;	SAOC	S 072	8WS				·			\prod					Stainless Steel Plastic		COMPANY	COMPANY	COMPANY
					cBs			 										ss	Stainles: Plastic		NO O	NO OS	S O O
					oiteac		_							\perp			<u> </u>	Glass			.:		
	<u> </u>		on no		eseiC			1	X			X		{				ľ	II II				
_		Τ,	Solder	10 8	 ijslo\	1096	1	 	<u> </u>			$\frac{\lambda}{\lambda}$	10					ပ	SS				
							TIME	\$0 II	1135	3	<i>عدد]</i>	1700	1705		$\setminus \mid$							۸ ا	
							Ľ		=						$\downarrow \downarrow$		-			1 3	1.//		
				l			DATE	70/01/20					ا ر					/PE:	E = Encore		17	[3	1
,	Δ.	<u>e</u>	ခု					3							_\			CONTAINER TYPE:	E = E	M.	X	M	B
	BGMP	lama	T99105-06							.	ı		ı		١			Z		ATURE	蓝	H	aj `
		Kevin McNamara	Ē		1							34				\		NOS		SIGNATURE	SIGNATURE	SIGNATUR	SIGNATURE
ĺ	٠	Kevir			7				ŀ	, .		7	ĺ		ľ		i		뒱	<u>s</u> v	Se	SIG	<u>S</u>
				,	Y		ġ	BF.	8	눏	α	8	L			\setminus			dime				
	i			(SE	750K		SAMPLE NO.	24 MW 23 BF	Vュはかいるは日	VactmWacter	1 24 M W 25 B	4 MED V99W634	V99W634F			1		S = Soil	w = water SD = Sediment	7	M	*	
		PROJECT MANAGER		SAMPLERS (Signatures)	1	,	ХАМF	3	3	3	3	P	9/				\	s:		 7	RECEIVED BY: M. CHURUM	A. GALLOW	
	PROJECT NAME	JANA		(Sign	إ		y y	+	Ę	12	2	₹ 1	2							FELINGUISHED BY:	77	7.7 7.7	ا ا
	CT	CT M		ERS	45			4	4	7	7	1	2			ļ		~		1 Z		型 数 が	RECEIVED BY:
	OPE	OJE	#	MPL	' '			إحر	7	>	>	#	>				\	MATRIX	7 PE:	No.	, 6	ğ.	<u> </u>
1	씸	PR	∄	N A	×	×			. [İ		•					V	≨₹	- li	THE REAL	Ä.	핂 `	쯌 🥦

22

22

2

7

1004

CHAIN OF CUSTODY RECORD Water samples are preserved as indicated on the sample labels. DATE 3/13/06 IME: APO 1 9 M <u>V</u> C 4 105 <u>ড</u> 2 3 3 Aguix Type DATE: 7/4/06 19/5/ いてしか /Sarei SIOSMS ÷ All samples are preserved at 4° C. 11 E314.0 Perchlorate ebitlus s.atée ANALYTICAL METHODS **BSK 112** Kenner **FETRA TECH, INC.** E323'3/E412'1 N / TOC Kung E300/310.1/160.1 CL/S/ALK/TDS ELAX SW6010 / 7470 / 7471 Metals 1835 West 205th Street Torrance, CA 90501 Stainless Steel **EMAX Labs** COMPANY COMPANY COMPANY Plastic ് ഗ്ല 128× 1050 1340 SHIPPED TO: 0800 1230 0815 TIME 3/13/06 E = Encore CONTAINER TYPE: 4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108 Vandenberg, AFB T99105-06 Kevin McNamara BGMP **TETRA TECH, INC.** SD = Sediment RECEIVED BY. CHUCUM. V2#MV26A 124 MW 26B W = Water SAMPLE NO. V24PMW26 RELINQUISHED BY: A: GALICIA · COLFEE S = Soil SAMPLERS (Signatures) V24MW30A 3 V99 BEB200 V24TB1217 PROJECT MANAGER PROJECT NAME CLIENT PPE

OBSERVATIONS/COMMENTS:

-iltered Sample

Number of Containers

S

7 20

PAGE / OF

060123

TURN-AROUND TIME:

Standard

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, inc.

COLLY EN SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:

TEMPERATURE ALANK ACH COOLER: (KES) NO

EACH COOLER:

TOTAL NUMBER OF CONTAINERS

METHOD OF SHIPMEN 26 or

Tt-IRP-009 (04/26/05)

1001

OCCI34 CHAIN OF CUSTODY RECORD Water samples are preserved as indicated on the sample labels DATE 115/06 DATE IT OR 3/15/06 All samples are preserved at 4° C. 4 abiflu2 S.aY6.2 ANALYTICAL METHODS 32K 112 SITE PRESERVATIVES E323'3/E412'1 N / LOC TETRA TECH, INC. EM XX アンスメ COMPANY E300/310.1/160.1 CL/S/ALK/TDS SW6010 / 7470 / 7471 Metals 1835 West 205th Street Torrance, CA 90501 COMPANY: Stainless Steel COMPANY SW8270 SVOCs Plastic ം ജ പ 1500 080 1520 087/ 156 176 孫 TIME E = Encore 4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108 DATE CONTAINER TYPE: Vandenberg, AFB T99105-06 Kevin McNamara BGMP

DARW MOTO

124 TB 1221 44 MW 27B

TADIVE TY

Vad mm pc/

SAMPLE NO.

SAMPLERS (Signatures)

Tookoot

PROJECT MANAGER

#0L

PROJECT NAME

CLIENT

ンイをシュダイ

Sample NO. Vatimus9A

S M <u>6</u> 3

S

V

3

D

×

D 4

OBSERVATIONS/COMMENTS:

47 60 10 B(AG 66, ASCA, SC, COT)

Filtered Sample

Matrix Type

Jumber of Containers

T =0-1

PAGE (

90/41/60

DATE

EMAX Labs

SHIPPED TO:

TETRA TECH, INC.

TURN-AROUND TIME:

Standard

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:

TEMPERATURE BLANK EACH COOLER: YES NO

1. S.B

SD = Sediment

RECEIVED BY:

-CONOR

FOUND OF (ARE

RELINQUISHED BY:
A. CANCIOLA

W = Water

PPE

S = Soll

TOTAL NUMBER OF CONTAINER

METHOD OF SHIPMENT とのでいると

Tt-IRP-009 (04/26/05)